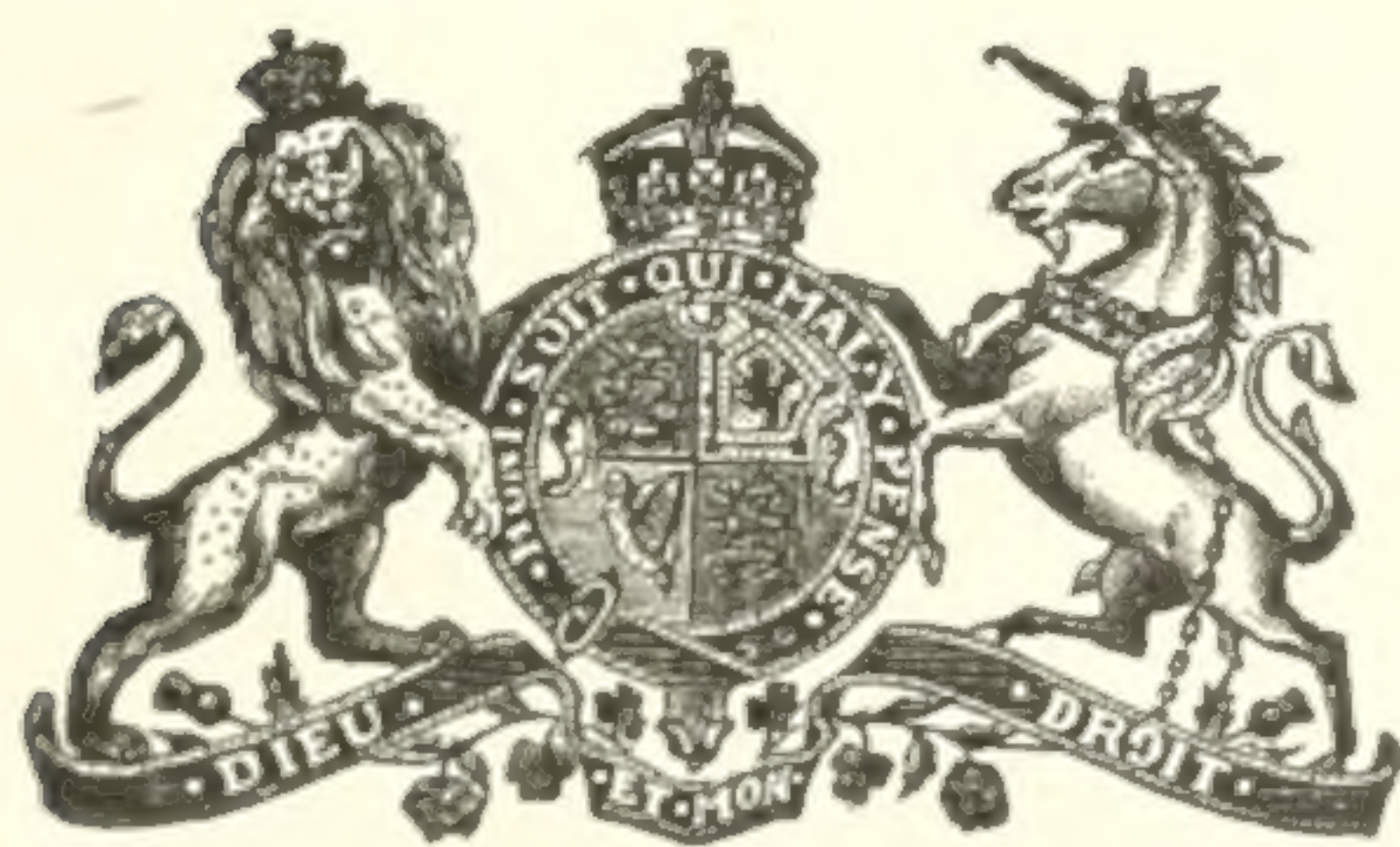


TENTH ANNUAL REPORT  
OF THE  
COMMISSIONERS OF THE TRANS-  
CONTINENTAL RAILWAY

BEING FOR THE  
FISCAL YEAR ENDED MARCH 31

1914

*PRINTED BY ORDER OF PARLIAMENT.*



OTTAWA  
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EXCELLENT MAJESTY

1914







# NINTH ANNUAL REPORT

## OF THE

# NATIONAL TRANSCONTINENTAL RAILWAY COMMISSIONERS

OTTAWA, July 15, 1914.

Hon. FRANK COCHRANE, P.C.,  
Minister of Railways and Canals,  
Ottawa.

SIR,—I have the honour to transmit through you to His Royal Highness the Governor General in Council the annual report of the Commissioners of the Transcontinental railway, for the fiscal year ended March 31, 1914, setting forth the receipts and expenditures in connection with the Eastern Division of the National Transcontinental railway, and such other matters in relation to the said railway as appear to be of public interest.

Information in detail as to the progress of the work will be found in the report of the Chief Engineer, and in the reports of the district engineers, the mechanical engineer, and the bridge engineer, hereto annexed.

The total expenditure during the fiscal year on account of construction was \$12,684,663.16, making the total expenditure on this account from the organization of the commission in 1904 to March 31, 1914, \$142,967,999.02.

(It should be noted in this connection that no payments have been made by the commission on account of interest on capital expenditure; nor has the commission refunded any part of the expenditure made by the Government on the approaches to the Quebec bridge before the taking over of the said approaches by the commission as a part of the Transcontinental railway. Neither of these items, therefore, is included in the statement of expenditure to March 31, 1914.)

Tracklaying in the main line of the Eastern Division, *i.e.*, between Moncton and Winnipeg, was completed on November 17, 1913, when the last spike was driven connecting districts "B" and "C." (This does not include the Quebec bridge, 1.10 miles.) The total miles of track-laying completed on March 31, 1914, was:—

	Miles.
Main line.. . . .	1,803.42
Double track, and line from bridge to Quebec.. . . .	20.79
Slidings and yards.. . . .	423.26
Total track.. . . .	2,247.47

Steel bridges were 97.2 per cent completed on March 31, 1914.

During the fiscal year, contracts, after having been duly advertised and sanctioned by the Governor in Council as required by the National Transcontinental Railway Act, have been awarded in each case to the lowest tenderer complying with the requirements of the commission, as follows:—



STEEL RAILS.

*Dominion Iron & Steel Company, Limited.*—6,081 gross tons, 80-pound steel rails for delivery at Hervey Junction and St. Anselme, Que., as follows: 1,732 gross tons f.o.b. cars, St. Anselme, Que., at \$35.65 per gross ton; 4,349 gross tons f.o.b. cars, Hervey Junction, at \$37.25 per gross ton.

*Dominion Iron & Steel Company, Limited.*—1,825 gross tons, 80-pound steel rails delivered free on dock of Quebec & Lake St. John railway, or other dock as engineer may designate in Quebec prior to closing of navigation 1913. Price, \$33.75 per gross ton.

QUEBEC-LÉVIS TRAIN FERRY.

*Cammell Laird and Company, Limited, Birkenhead, England.*—One steel screw steam railway train ferry for delivery at the harbour of Quebec on or before May 15, 1914. Price, £115,000.

CAR FERRY SLIP.

*La Compagnie Generale d'Entreprises Publiques, Limitée, Lévis, Qué.*—For construction of a car ferry slip and approaches thereto at Lévis. Price, schedule rates. Engineer's estimate of cost on basis of lowest tender, \$36,644.22.

*La Compagnie General d'Entreprises Publiques, Limitée.*—Dredging and excavation of material for car ferry slip, at Lévis, Que. Price: solid rock, \$7.45 per cubic yard; other material, 90 cents per cubic yard. Engineers' estimate of cost on basis of lowest tender, \$210,400.

STEEL BRIDGES.

*The Canadian Bridge Company, Limited.*—Superstructure for one steel railway bridge at Beaver creek, Mile 113 from east end of district "E." Price: steel 4.89 cents per pound; timber, \$52 per M b.m.

*The Hamilton Bridge Works Company, Limited.*—Superstructures for two steel railway bridges at first and second crossings of Megiskan river at Mile 163.5 and 178, west of Weymontachene, district "C." Price: steel, 5.18 cents per pound; timber, \$51 per M. b.m.

*The Canada Foundry Company.*—Steel superstructure for six railway bridges, as follows:—

Name.	Mileage, Dis- trict "C."	Steel, per pound.	Timber, per M B.M.
		Cents.	\$ cts.
Kekek river.....	119.4	5.35	50 00
Durant lake.....	134.3	5.33	50 00
1st crossing, Atik river.....	138.5	5.24	50 00
2nd " ".....	143.75	5.14	50 00
3rd " ".....	146.8	5.14	50 00
4th " ".....	150.0	5.14	50 00

*The Canadian Bridge Company, Limited.*—Steel superstructure for one railway bridge at third crossing South river, Mile 117, east end of district "C." Price: steel, 4.72 cents per pound; timber, 54 per M. b.m.



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*The Canadian Bridge Company, Limited.*—Steel superstructures for four railway bridges, as follows:—

Name.	Steel, per pound.	Timber, per M B.M.
	Cents.	\$ cts.
Dead Fox creek .....	5.40	55 00
Okikedasik river approaches .....	4.93	55 00
Departure creek .....	4.93	55 00
Little Mistonge .....	4.93	55 00

## MACHINERY.

*Berlin Machine Works, Limited.*—Machinery for car shops at Transcona, Man. Total price, \$25,885.02.

*The Canadian Fairbanks-Morse Co., Ltd.*—Machinery and furnaces for car shops at Transcona. Total consideration, \$20,799.50.

*Mussens Limited.*—Machinery for car shops at Transcona, Man. Total consideration, \$16,043.

*The Canada Machinery Corporation, Limited.*—Machinery for car shops at Transcona. Total consideration, \$21,755.

*J. A. Fay & Egan Company.*—Machinery for car shops at Transcona. Total consideration, \$11,898.33.

*The John Bertram & Sons Co., Ltd.*—Machinery for car shops at Transcona, Man. Total consideration, \$48,615.

*Williams & Wilson, Limited.*—Machinery for car shops at Transcona, Man. Total consideration, \$37,280.

*The Canadian Crocker-Wheeler Company, Limited.*—Electrical motors, controllers, starters, and transformers for installation in car shops at Transcona, Man. Total consideration, \$26,500.

## ELECTRIC WIRING, CAR SHOPS.

*L. K. Comstock & Company.*—Installation of electric wiring system apparatus and material for power, motor, light, and telephone service in car shops at Transcona, Man. Total consideration, \$29,904. (Schedule of prices for additions and deductions.)

## RAILWAY TIES.

*Ernest Gauthier, Grand'Mère, Que.*—One hundred and ninety-six thousand railway ties for delivery at points designated by engineer between miles 55 and 141, west of the Quebec bridge. Price: First-class, 54½ cents each; second-class, 49½ cents each.

## LOCOMOTIVE AND CAR SHOPS AT ST. MALO, QUE.

*Joseph Gosselin, Lévis, Que.*—For construction of locomotive and car shops, industrial track, and yard sewer system, connecting with the Quebec city sewer mains.



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or St. Charles river, tracklaying and grading, drainage, ditches, etc. Price: Locomotive and car shops, lump sum, \$925,404.68; (with schedule of prices for additions and deductions) for yard water and sewerage systems to the city main, the yard tracklaying and grading, including ditches, culverts, etc., all foundations for machines, and equipment and extra depth of foundations required other than shown on plans, at schedule prices, involving an expenditure estimated by the engineer at the prices of the lowest tenderer of \$209,443.80.

ENGINE-HOUSE AT O'BRIEN, QUE.

*F. Munro & Co.*—Construction of a 12-stall engine house without machine shop at O'Brien, Que., district "C," for lump sum of \$59,189.44, exclusive of heating apparatus.  
(With schedule of prices for additions and deductions.)

HEATING SYSTEMS FOR ENGINE-HOUSES AT DOUCET AND O'BRIEN.

*F. W. Miller Heating Co.*—For steam heating systems to be installed in round-houses at Doucet and O'Brien, Que. Price, \$4,575 each.

STATION BUILDINGS, ETC.

*John King, Fort William, Ont.*—Construction of station and other buildings between Mile 57, west of Weymontachene, Que., and Cochrane, Ont., as follows:—

Section No. 19—

7 design "A" stations at.. . . . .	each	\$ 3,950
7 tool houses, No. 1.. . . . .	"	212
7 station privies.. . . . .	"	175
7 coal boxes.. . . . .	"	122

Section No. 20—

1 design "D" station.. . . . .	\$ 23,500
6 design "A" stations.. . . . .	each 3,950
1 trainmen's house.. . . . .	11,300
1 storehouse.. . . . .	8,500
1 icehouse.. . . . .	3,550
1 freight house.. . . . .	4,130
7 tool houses.. . . . .	each 212
6 coal boxes.. . . . .	" 122
6 privies.. . . . .	" 175

Section No. 21—

6 design "A" stations.. . . . .	each	3,950
8 tool houses.. . . . .	"	212
6 coal boxes.. . . . .	"	122
6 station privies.. . . . .	"	175

Section No. 22—

1 design "D" station.. . . . .	\$ 23,500
1 26 foot by 60 foot station.. . . . .	5,000
16 design "A" stations.. . . . .	each 3,950
1 trainmen's house.. . . . .	11,300
1 storehouse.. . . . .	8,500
1 freight house.. . . . .	4,130
1 icehouse.. . . . .	3,550
4 section houses.. . . . .	each 3,300
1 section house, with plumbing.. . . . .	3,500
22 tool houses.. . . . .	each 212
17 coal boxes.. . . . .	" 122
17 station privies.. . . . .	" 175
4 section privies.. . . . .	" 160

(with schedule of prices for additions and deductions.)



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*Crockett & Tharle, Fort William, Ont.*—Construction of one storehouse and two tool houses at Cochrane, Ont. Price: storehouse, \$8,150; two tool houses at \$207 each. (With schedule of prices for additions and deductions.)

*John King, Fort William, Ont.*—Construction of one freight house at Cochrane for lump sum of \$4,000, and one icehouse for lump sum of \$3,500. (With schedule of prices for additions and deductions.)

*Charles Achille Vezina, Quebec, Que.*—Construction of office building on site of Leonard shops at St. Malo, Que. Price, lump sum of \$3,918. (With schedule of prices for additions and deductions.)

*Crockett & Tharle, Fort William, Ont.*—Construction of seven section houses and seven section privies in District "E." Price: Section house, \$3,200 each; section privies, \$175 each.

## 200-TON MECHANICAL COALING PLANTS.

*The Roberts and Schafer Company.*—Six 200-ton double-track mechanical coaling plants with sand house and storage, one erected complete at each of the following divisional points, viz.: One at Monk, for the lump sum of \$17,199; one at Bridge, for the lump sum of \$16,271; one at Fitzpatrick, for the lump sum of \$17,967; one at Parent for the lump sum of \$18,432; one at Doucet, for the lump sum of \$19,010; and one at O'Brien, for the lump sum of \$19,052.

## SHAVINGS AND SAWDUST EXHAUST SYSTEM.

*The A. B. Ormsby Company.*—For the construction and erection of a shavings and sawdust exhaust system in the car shops at Transcona, for the lump sum of \$8,021.

## QUEBEC TERMINALS.

An agreement was entered into under date of December 22, 1913, to which the parties respectively are: (1) His Majesty The King, represented by the Minister of Railways and Canals and the Commissioners of the Transcontinental railway; (2) The Canadian Pacific Railway Company and the North Shore Railway Company; and (3) the city of Quebec. It provides for the erection and equipment by the Government, in the city of Quebec and the adjoining municipality, of railway workshops, and the erection by the Government and the said railway companies, together, of a union passenger station and freight houses and terminal facilities on the companies' property in Quebec. In consideration of these works the city grants certain concessions duly set out in the agreement.

An agreement was also entered into, under date 18th day of March, 1914, to which the parties, respectively, are; (1) Canadian Pacific Railway Company; and (2) His Majesty, represented by the Minister of Railways and Canals, and the Commissioners of the Transcontinental railway, by which provision is made, for the purposes of the Eastern Division of the National Transcontinental railway, and of all railways operated and controlled by the Government of Canada, while so operated and controlled, for the joint use by the parties to the agreement of a track connection between the said Eastern Division and the Canadian Pacific railway, and of the company's passenger and freight stations and terminal facilities in the city of Quebec, for the purposes of a union terminal and property.

The whole respectfully submitted.

Your obedient servant,

R. W. LEONARD,  
Commissioner.



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## CHIEF ENGINEER'S REPORT OF PROGRESS FROM MARCH 31, 1913, TO MARCH 31, 1914.

OTTAWA, ONT., July 8, 1914.

The Commissioners of the Transcontinental Railway,  
Ottawa, Ontario.

SIRS,—I beg to submit the following report on progress of work from March 31, 1913, to March 31, 1914:—

*District "A."*—All work of grading, buildings, coaling plants, bridges, etc., is complete, and very little remains to be done on installation of equipment in divisional point engine-houses.

This portion of the line was turned over to the operating department on November 21, 1912.

The total length of main line track on this district is 256.29 miles; sidings and yards, 68.96 miles.

Steel bridges are 100 per cent complete.

*District "B."*—Contract No. 7 is practically completed on all items, and is being operated for a distance of 29 miles from the New Brunswick boundary westward, in conjunction with the portion in New Brunswick.

Contract No. 8 still requires the following to complete: Train-filling, 140,000 cubic yards; ballasting, 60,000 cubic yards; telegraph line, about 27 miles; fencing, 52 miles; the completion of tracklaying in the "Monk" division yard, about  $7\frac{1}{2}$  miles; erection of coaling plant and installation of balance of equipment in "Monk" engine-house.

The station buildings are practically completed.

Contract No. 9 is practically completed, with the exception of about 7 miles of tracklaying in "Bridge" division yard, and ballasting of same, amounting to about 20,000 cubic yards.

A contract has been let for the coaling plant to be erected at the "Bridge" yard, and this will be completed during the coming summer.

A pumping plant for water service at "Bridge" has still to be installed.

Contract No. 9A, "Terminals Contract, Quebec Bridge to Champlain Market."—This contract still requires the following to complete: Approximately 70,000 cubic yards train-filling, 20,000 cubic yards ballast, about 2 miles of tracklaying, 14 miles of fencing, 7 miles of telegraph line, and erection of station building at Champlain market.

Quebec and Lévis Ferry Slips and Approaches.—On the Quebec side the work is being done by the Quebec Harbour Commissioners. On the Lévis side, fair progress has been made, and the work should be completed by the first of September.

Train Ferry, at Quebec.—This ferry was launched at Birkenhead, England, by Cammell, Laird & Co., on January 17, 1914, and is under contract to be delivered the early part of the summer.

Leonard Locomotive Car Shops at Quebec.—Contract was let for this work in October, 1913, and very fair progress has been made. The mechanical engineer's report, herewith, gives in detail the condition of various parts of the plant under construction.

Contract No. 10 is practically complete, with the exception of some installation of machinery at the "Fitzpatrick" roundhouse, which is now being proceeded with.



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A considerable quantity of re-tieing will be done during the coming summer, and ties are now being delivered for this work.

All buildings are practically complete, but a coaling plant has still to be erected at Fitzpatrick.

Contract No. 11 is completed, but a small amount of re-tieing will be done during the coming summer.

Contract No. 12.—The grading on this contract is completed; also the concrete substructures. The steel superstructures are all in place, with the exception of that over the Susie river.

A small amount of tracklaying, ballasting, and fencing still remains to be done in the "Parent" division yard.

The buildings on this contract are about 75 per cent completed, with the exception of the engine house and section house at "Parent," which are completed. The installation of equipment at this point is being proceeded with. A coaling plant is to be erected this season at "Parent."

Contract No. 13B.—The grading on this contract is practically completed, with the exception of some train-haul embankments, amounting to 410,000 cubic yards. The ballasting still to be done consists of some 22 miles of main line and about 9 miles in "Doucet" division yard, amounting to about 100,000 cubic yards.

The remaining tracklaying is about 9 miles in "Doucet" yard.

No telegraph line has been erected on this contract, 56 miles.

All stations and other buildings (at "Doucet") have still to be erected, but contracts have been let for same, and these will be erected during the coming summer, as also a coaling plant at "Doucet."

One 25-foot concrete arch, and one 20-foot arch, as well as some smaller structures, are to be built during the summer. The concrete substructures for three crossings of the Atik river will also be placed.

The steel viaduct over Canyon creek has been completed, and the Mamaguish crossing is practically complete.

The average number of men employed on the district during the year was 1,647; and horses, 67.

The total length across District "B" (not including the Quebec bridge) is 562.65 miles.

Main line track is 564.92 miles, which includes double track from "Bridge" to Cap Rouge.

A total of 112.17 miles of sidings and yards have been laid; and there are 10.90 miles of track laid in line from Quebec bridge to Champlain Market (including 5 miles of double track.)

Total track laid in district to March 31, 1914, 687.99 miles.

The percentage of steel bridges erected on the district to March 31, 1914, 99.7 per cent.

*District "C—D."*—Contract No. 13C. On this contract the work still remaining to be done consists principally of: train-filling, 220,000 cubic yards; ballast, 60,000 cubic yards; concrete, 2,200 cubic yards; and seven station buildings, all of which will be finished during the coming summer.

Contract No. 14.—With the exception of train-filling on sundry sags and sink holes, the grading on this contract is practically completed. The remaining work consists of the erection of three steel bridges, the completion of the water service in "O'Brien" division yard, the erection of steel tank, pump houses, etc., and the erection of coaling plant at "O'Brien."

The "Cochrane" engine house, track scales, etc., are complete, and the "O'Brien" engine house is 90 per cent done. Stations and other buildings on the contract are 82 per cent complete.



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Contract No. 15.—The grading on this contract is complete, as are also buildings and all other items.

Contract No. 16.—The work remaining to be done on this contract consists principally of the following: train-filling, 255,000 cubic yards; ballast, 105,000 cubic yards; telegraph line, 50 miles. The condition of the various items being: track-laying, 91 per cent complete (balance being three miles in "Hearst" division yard); culverts, 92 per cent complete; water service, 65 per cent complete; "Hearst" engine house, 98 per cent complete; all other buildings, 93 per cent complete. The track scales and cinder hoist have not yet been started.

It is expected that all work on District "C-D" will be fully completed during the coming season.

On November 17, 1913, track-laying on main line from east to west met at the first crossing of the Megiskin river on contract No. 13, this connection completing the main line track-laying from Moncton to Winnipeg.

The total length of the main line on District "C-D" is 412.67 miles, and track has been laid over the entire length. In addition, there are 96.77 miles of sidings and yards.

The percentage of steel bridges erected on District "C" to March 31, 1914, 84.4 per cent; and on district "D," 94.4 per cent.

The average number of men employed during the year was 1,008; and horses, 14.

A large amount of extra train-filling was done on the district during the past year on account of sink holes developing.

A slide occurred at the Okikodasik, carrying the east abutment, foundation piles, and an 80-foot girder. This has been temporarily replaced, and a steel viaduct will be erected during the coming summer.

The telegraph line is practically completed on contracts 13, 14, and 15 but labour conditions have caused considerable delay on contract No. 16 on this work.

Several serious bush fires occurred on the district during the past season. One of our Residency buildings at Bell river on contract No. 13 was burned, as also one at Hearst on contract No. 16. The general contractors lost their machine and repair shops and other buildings at Peter Brown Creek headquarters, and this caused some delay in the progress of the contract.

*District "E".*—Contract No. 17: The grading on this contract is 87 per cent complete, the balance being train-filling amounting to 632,000 cubic yards, one-third of which goes to Pagachuan river.

Track-laying is 82 per cent complete, the balance being 8 miles to lay in "Grant" division yard.

All main line has first lift of ballast, and part of it second lift. There remains 173,000 cubic yards ballasting still to be done.

All concrete work is finished, and permanent bridge substructures are 97 per cent complete.

Other work still to be done consists principally of the following: Telegraph line, 60 miles; part of "Grant" division yard water and sewer service; completion of the engine house and equipment at "Grant" division yard.

Station and other buildings are 68 per cent complete.

Contract No. 18.—This Contract is practically complete with the exception of the following: Train-fill, 380,000 cubic yards; ballasting, 32,000 cubic yards; telegraph line, 30 miles.

Contract No. 19 E is practically complete on all items.

The total length of the main line on District "E" is 195.33 miles, and track is laid over the entire length. In addition, there are 33.56 miles of sidings and yards.

The percentage of steel bridges erected on the district to March 31, 1914, 93.4 per cent.



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The average number of men employed on the district during the year was 904; and horses, 7.

Ballasting and train-filling progressed slowly last year, partly owing to the late spring. There were also a number of sink holes developed which delayed other work. These are now, however, up to grade, and it is expected will remain so.

All concrete culverts and bridge substructures on this district are finished, and all the large steel viaducts are now erected, but there are still some eight small girder spans to be erected. This will be done during the coming summer.

The water service is practically completed except at "Grant" division yard, and several small connections to water tanks.

Labour conditions have delayed the construction of the telegraph line on this district, but this will be completed during the coming summer.

All stations and other buildings are well under way, and will be completed at an early date.

It is anticipated that all work on District "E" will be fully completed during the coming season.

*District "F".*—Contracts Nos. 19F, 20, 20A: East end of district to 11.5 miles west of Superior Junction. These contracts are fully completed.

Contract No. 21: 11.5 miles west of Superior Junction to Red River bridge. This contract is complete with the exception of some track-laying and train-filling in Transcona division yard, and the completion of yard layout in Redditt division yard.

*District "F".*—Contract No. 22: Red River bridge to west side of Water street, Winnipeg. This contract is fully completed.

Contract No. 21A, for filling around Transcona shops, is practically completed, only a small amount of filling remaining to be done.

All buildings in the district are 99 per cent completed.

Various small uncompleted contracts on the district are as follows: Second cinder hoist at Redditt; laying guard rails on Red River bridge and approaches; extension of water and sewerage systems at Redditt and Graham; laying of additional track in Graham divisional yard; completion of section house near crossing, Dundee branch, C.N.R., at Transcona.

All work on this district will be fully completed during the coming summer.

The total length of the main line on District "F" is 376.48 miles, and 384.10 miles of main line track has been laid, including double track, Transcona to Winnipeg. In sidings and yards there are 111.80 miles track laid. Total track now laid on district, 495.90 miles.

The percentage of steel bridges erected to March 31, 1914, on District "F," 98.5 per cent.

The average number of men employed during the year was 296; and horses 7.

## GENERAL.

A contract was let in January, 1914, for the construction of coaling plants at the following divisional points: Monk, Bridge, Fitzpatrick, Parent, Doucet, and O'Brien, and work has started on some of these.

The mileage from Moncton, N.B., to the west side of Water street, Winnipeg, is 1,804.5 miles (including 1.10 miles as the length of Quebec Bridge contract).

Track-laying done to March 31, 1914, was:—

	Miles.
Main line. . . . .	1803.42
Double track and line from "Bridge" to Quebec. . . . .	20.79
Siding and yards. . . . .	423.26
Total track. . . . .	2247.47



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Bridges to March 31, 1914, 97.2 per cent complete.

I attach, hereto, reports from the various district engineers and bridge engineer, which speak for themselves.

The mechanical engineer's report, attached herewith, gives in detail the prevailing condition of the various shops, roundhouses, cinder hoists, coaling plants, etc., from Moncton to Winnipeg.

I also attach a list showing casualties which occurred during the year ending March 31, 1914.

The following photographs have been selected as being of interest in the foregoing report, and are to accompany same:—

*Bridges.*—Mamaguish River viaduct, Ground Hog River bridge, White River bridge, Bascule Lift Span over Red river, Winnipeg.

*Shops.*—Interior, freight car shop, Transcona; Centre Bay, freight car shop, Transcona; Exterior view, freight car shop, Transcona.

Your obedient servant,

GORDON GRANT,  
Chief Engineer.

CASUALTIES, MARCH 31, 1913, TO MARCH 31, 1914.

DISTRICT "A."—None.

DISTRICT "B."

Date.	Name.	Cause of Casualty.
April 29, 1913..	Joseph Dionne.....	Crushed under engine.....
May 20, 1913..	G. Guigiunto.. ..	Died from injuries received in train wreck. ....
October 21, 1913..	J. H. Taylor.....	Killed while boarding train of dump cars in motion.

DISTRICT "C-D."

April 28, 1913..	Michael Oakushervich.	Killed by collapse of temporary trestle while engaged in repairs.
" 28, 1913..	A. Cozlowich. ....	Badly injured in above accident. No report as to outcome of injuries.
May 4, 1913..	Frank Forsetta.....	Killed by tree falling on him.
July 15, 1913..	H. Beschoke.....	Crushed under train.
August 1, 1913..	— Downey. ....	Drowned by upsetting of canoe.
" 16, 1913..	P. Cunningham.....	Injured by falling off ballast train.

DISTRICT "E."

September 8, 1913..	John Gibson.....	Killed by falling between cars while in motion.
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DISTRICT "F."

March 20, 1914..	F. D. Friend (resident engineer).	Died at Graham, Ont. Cause, heart failure.
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## REPORT OF DISTRICT ENGINEER—DISTRICT "B."

QUEBEC, June 10, 1914.

GORDON GRANT, Esq.,  
Chief Engineer,  
Ottawa.

SIR,—In accordance with your instructions, I beg to transmit, herewith, annual report of progress for the fiscal year ending March 31, 1914; showing the percentage of work done on each contract on District "B," the work remaining to be done, and such other details as are required to make plain to you the present state of progress and probable date of completion.

## CONTRACT 7, MILES 203-150, NEW BRUNSWICK BOUNDARY WESTERLY.

*Contractors—M. P. and J. T. Davis.*

This contract, with the exception of a little fencing, cattle guards, mile posts, and painting of water tanks, is completed. The Intercolonial Railway are now operating a part of it between the New Brunswick boundary and St. Eleuthere, a distance of 29 miles.

Description.	Percentage previously returned.	Percentage to date.
Grading.....	95	100
Tracklaying.....	95	100
Ballasting.....	95	100
Trestles and culverts.....	95	100
Permanent bridge substructures.....	95	100
" " superstructures.....	95	100
Water service.....	.....	97
Fencing.....	25	85
Telegraph line.....	91	98
Buildings.....	61	100

## CONTRACT 8, MILES 150-0, QUEBEC BRIDGE.

*Contractors—M. P. and J. T. Davis.*

Contrary to our understanding with the contractors, this contract is not yet completed, and from present appearances it will not be in a state to be handed over to the commission before the first of September. There are still over one hundred thousand cubic yards of train-filling to do, besides ballasting of 10 miles, general trimming up of several miles of roadbed, completion of the Monk divisional yard, as well as two water tanks, 27 miles of telegraph line, and 52 miles of fencing to erect.

## BUILDINGS.

Our buildings on this contract are completed, with the exception of our Lapointe and Lippée stations, which are about 50 per cent completed.

## STEEL SUPERSTRUCTURES.

All steel superstructures are in place.



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PERCENTAGE OF WORK DONE TO DATE.

Description.	Percentage previously returned.	Percentage to date
Grading.....	94	98
Tracklaying..... Monk	95	97
Ballasting .....	50	87
Trestles and culverts.....	95	100
Permanent substructures .....	95	100
" superstructures .....		100
Water service.....	25	70
Telegraph line.....	60	74
Buildings.....	60	98

COMPLETION OF WORK.

As stated above I do not think that this contract can be completed before the first of September, the contractors having abandoned the operation of the contract between St. Anselme, mile 26, and Monk, mile 105, for the winter; the Quebec Central Railway entered into an agreement with the Government in the month of February to carry on the operation till the first of May, thus affording great relief to settlers and lumber companies.

CONTRACT 9, MILES 0-50, QUEBEC BRIDGE WESTERLY.

Contractors—M. P. and J. T. Davis.

This contract is entirely completed, with the exception of the sidings in our Bridge yard. The difficulty experienced here is the finding of suitable ballast, as the work itself should not take more than a month to finish. The water service for the Bridge yard, which requires a special pumping plant, has to be completed by the commission.

PERCENTAGE OF WORK DONE TO DATE.

Description.	Percentage previously returned.	Percentage to date.
Grading.....	98	100
Tracklaying.....	95	99
Ballasting.....	95	99
Trestles and culverts.....	95	100
Permanent substructures.....	98	100
Permanent superstructures.....		100
Water service.....	2	95
Telegraph line.....	95	100
Fencing.....	95	100
Buildings.....	95	100

TERMINALS CONTRACT, QUEBEC BRIDGE TO CHAMPLAIN MARKET.

Contractors—M. P. and J. T. Davis.

The double track is laid and ballasted from the Quebec bridge to Mile 5, and a single track from there in to the Champlain Market site. Two months' work in the



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spring will be sufficient to complete the whole line from the Quebec bridge to the Champlain market. This is, of course, irrespective of the station at the Champlain Market site, which has not yet been decided upon. The telegraph line has also to be attended to, but can be easily done within the time specified for the grading.

QUEBEC AND LÉVIS FERRY SLIPS AND APPROACHES.

On the Quebec side, the work is being done by the Quebec Harbour Commissioners. On the Lévis side, the contractors are La Compagnie Generale d'Entreprise Publiques. Very fair progress has been made, and the work should be completed by the first of September.

CONTRACT 10, MILES 50-150, Q.B. WESTERLY.

*Contractors—Macdonell & O'Brien.*

This contract is completed and ready for operation. A considerable quantity of new ties will have to be replaced in the track in the spring, and the machinery for the Fitzpatrick roundhouse has yet to be installed by our mechanical department. Some of the high side-hill cuts along the St-Maurice river also require attention, but this work is being done by the contractors by force work.

PERCENTAGE of work done to date.

Description.	Percentage previously returned.	Percentage to date.
	Per cent.	Per cent.
Grading .....	99	100
Tracklaying .....	99	100
Ballasting .....	95	100
Trestles and culverts .....	99	100
Permanent substructures .....	100	100
Permanent superstructures .....	100	100
Water service .....	95	99
Fencing .....	95	100
Telegraph line .....	95	100
Buildings .....	60	100

The re-tieing of the line will probably take four months to complete, but will not interfere with the operation of the line as it can be done by the section men.

CONTRACT 11, MILES 150-196-4 Q.B. WESTERLY.

*Contractors—Grand Trunk Pacific Railway.*

*Subcontractors—Macdonell & O'Brien.*

This contract is 100 per cent completed, and ready for operation.

CONTRACT 12, MILES 196-203-4 Q.B. WESTERLY.

*Contractors—Macdonell & O'Brien.*

The grading on this contract is completed, as are the concrete substructures. The steel superstructures are all in place, with the exception of that over the Susie river, mile 303.5, which has not yet been delivered. The tracklaying, ballasting, telegraph line and water service are completed, but there still remains some riprapping and a little trimming up to do.



BUILDINGS.

The station buildings are somewhat behind, but can easily be completed by September next. The engine house and section house at Parent are completed, but the machinery still has to be installed by our mechanical department.

PERCENTAGE OF WORK DONE TO DATE.

Description.	Percentage previously returned.	Percentage to date.
	Per cent.	Per cent.
Grading .....	95	99
Tracklaying .....	80	99
Ballasting .....	70	99
Trestles and culverts.....	90	99
Permanent substructures. ....	90	99
Water service .....	95	99
Telegraph line.. .	59	99
Buildings .....	20	72

CONTRACT 13, MILES 303.4-359.4, DISTRICT Bcb.

*Contractors—Macdonell & O'Brien.*

GRADING.

The grading on this contract is completed, with the exception of some train-haul embankments, which are to be rushed to completion in the spring. There are still 410,000 cubic yards of train-fill, which the contractors hope to complete by the 15th October.

CONCRETE SUBSTRUCTURES.

There still remain the following substructures to be put in: 25-foot arch at the Atik river; a 20-foot arch and some smaller concrete arches. Also the following bridges: 2nd, 3rd and 4th crossings of the Atik river.

SUPERSTRUCTURES.

The large viaduct over the Canyon creek has been completed, and the contractors for the steel superstructures are now putting up the Mamaguish crossing, which is 87 per cent completed.

TRACKLAYING.

The tracklaying in the main line is completed, but no track has been laid to date in the Doucet yard.

BALLASTING.

There still remain 22 miles of main line to ballast, as well as the track in the Doucet yard.

BUILDINGS.

None of the buildings on this contract have been started yet.

WATER SERVICE.

The tanks at Bolger and Doucet are delivered, but have still to be erected.





Transportation before construction of Transcontinental Railway.

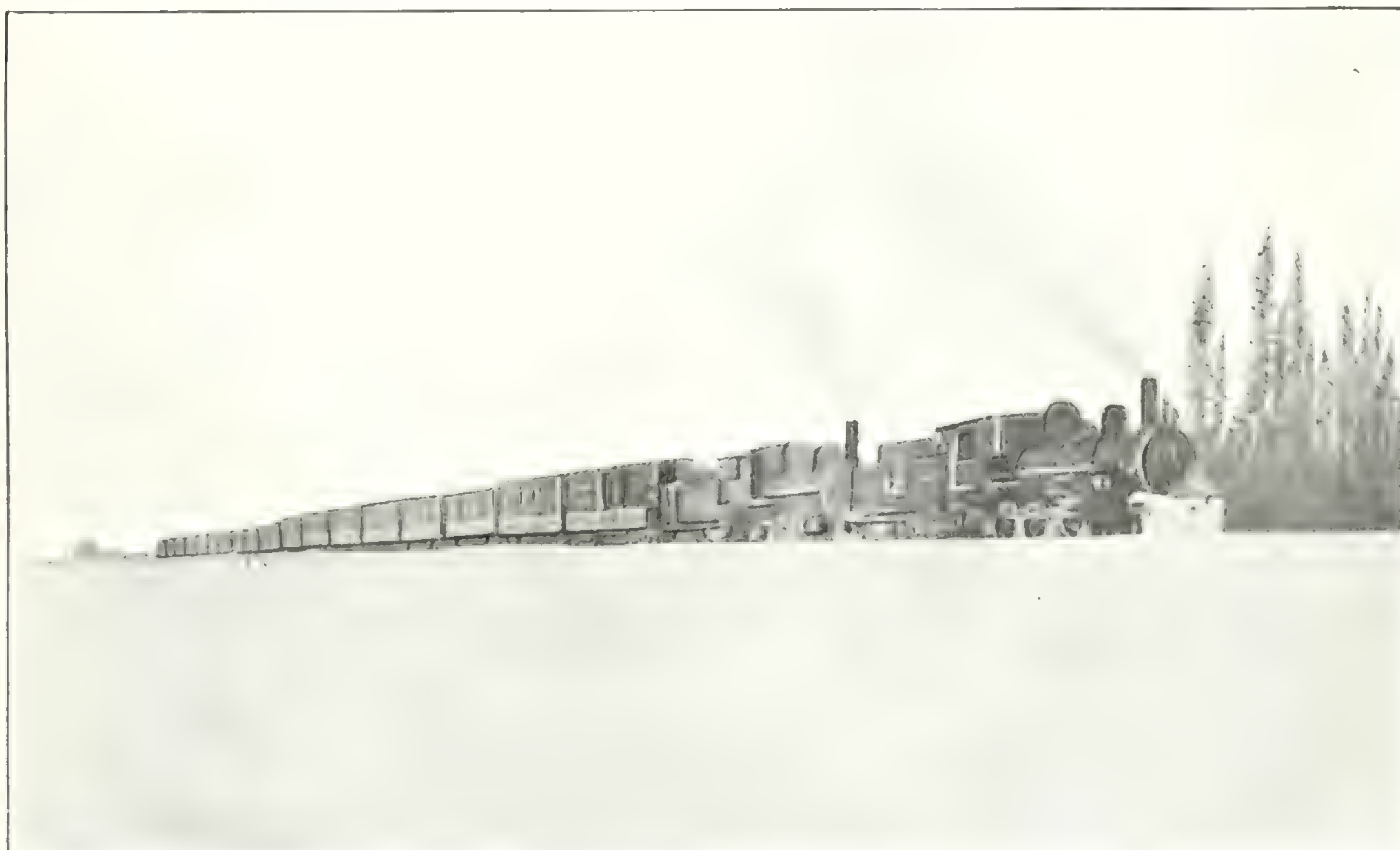








Transportation before construction of Transcontinental Railway.



First wheat train over Transcontinental Railway leaving Hearst, Ont., December 31, 1912







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PERCENTAGE OF WORK DONE TO DATE.

Description.	Previously returned.	Percentage to date.
	Per cent.	Per cent.
Grading . . . . .	35	85
Tracklaying . . . . .	1	75
Ballasting . . . . .		52
Trestles and culverts . . . . .	15	50
Permanent substructures . . . . .	4	60
Water service . . . . .		20
Telegraph line . . . . .		

CASUALTIES.

On Contract 8, Joseph Dionne, a French-Canadian, of St. Denis, was crushed under an engine, and died on the 29th April, 1913. On contract No. 12, G. Guigiunto, an Italian, 27 years old, died on the 20th May from injuries received in a train wreck. On the Terminals contract, J. H. Taylor, a tapeman employed on the Residency staff, was killed on the 21st October while boarding a train of dump cars in motion.

CONCLUSION.

Contract 7.—Is now operated in part, and can be placed wholly under operation in the spring.

Contract 8.—The contractors state that the work will be ready to be handed over by the first of July, but in view of previous delays, it is safer to place the date of completion at the first of September.

Contract 9.—If we can secure ballast for the Bridge yard, this contract can be operated on the first of August.

Contract 9A.—Should be completed by the first of September.

Contract 10.—Can be operated now.

Contract 11.—Can be operated now.

Contract 12.—Can be operated on the first of September.

Contract 13.—May be operated on the first of November, even if not entirely completed by that date.

Yours truly,  
A. E. DOUCET,  
District Engineer.

REPORT OF DISTRICT ENGINEER—DISTRICT “C-D.”

June 10, 1914.

GORDON GRANT, Esq.,  
Chief Engineer, N.T.R.,  
Ottawa.

SIR,—In accordance with your circular of June 6, file 12,424, I beg to report on progress and condition of work on District “C-D,” for the fiscal year ending March 31, 1914.



CONSTRUCTION.

The district comprises 58.57 miles of contract No. 13, contract No. 14 (150 miles), contract No. 15 (100 miles), and contract No. 16 (104.57 miles), the whole covering through mileage 820.23 to 1,233.37.

*Contract No. 13.*—Macdonell & O'Brien, contractors, O'Brien & Martin, agents. The part of the contract on this district extends from Mileage 56 "C" to 114.57 "C." The percentage of work done is as follows:—

	Complete.
Grading.. . . .	88.95 per cent.
Tracklaying.. . . .	96.59 "
Culverts and small waterways.. . . .	89.69 "
Bridge substructures.. . . .	60.00 "

Of the concrete work, only the first crossing of the Megiskan river remains. As the track only reached this crossing in November, contractors decided to wait until spring to commence work. The balance of the bridges are permanent timber trestles.

	Complete.
Ballasting.. . . .	73.9 per cent.
Telegraph.. . . .	94.0 "
Water Service.. . . .	99.5 "
Total contract.. . . .	86.0 "

BUILDINGS.

Work on the buildings has not yet started on this contract, but all the stations will be erected this coming summer.

Work remaining to be done consists principally of train-filling, 220,000 cubic yards; ballast, 60,000 cubic yards; concrete, 2,200 cubic yards; timber and various small items, value about \$285,000.

*Contract No. 14.*—Grand Trunk Pacific Railway Company, contractors. This contract, of 150 miles, extends from Mile 114.57 "C," west to Cochrane. The percentage of work done is as follows:—

	Complete.
Grading.. . . .	98.58 per cent.
Tracklaying.. . . .	97.14 "
Ballasting.. . . .	98.23 "
Culverts.. . . .	99.01 "
Bridge substructures.. . . .	90.00 "
Telegraph line.. . . .	96.00 "
Water service.. . . .	80.00 "
Cochrane engine house, track scales, etc.. . . .	100.00 "
Total contract.. . . .	97.50 "
O'Brien engine house.. . . .	90.00 "
O'Brien coaling plant (contract is not yet let)—	
Buildings.. . . .	81.50 "

Work remaining to be done consists of Okikodasik River and Departure Creek viaducts; Little Mistongo bridge; water service in O'Brien division yard, and erection of steel tank, pump-houses, etc., and train-filling on sundry sags and sink holes, amounting in value to about \$300,000.

Buildings to complete, about \$139,000.

*Contract No. 15.*—E. F. & G. E. Fauquier, contractors. This contract, extending from Mile 103 to Mile 203, is finished

Buildings on this contract are finished.



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*Contract No. 16.*—M. P. & J. T. Davis, contractors, O'Brien, McDougall & O'Gorman, agents. This contract is 104.57 miles long, and extends from Mile 203-247.57, District "D," and from Mile 0-60, old District "E."

The percentage of work done is as follows:

	Complete.
Grading.. . . .	94.52 per cent.
Tracklaying (balance in Hearst division yard).. . . .	90.86 "
Ballasting.. . . .	70.64 "
Culverts and small waterways.. . . .	91.9 "
Bridge substructures.. . . .	98.82 "
Water service.. . . .	64.98 "
Telegraph line.. . . .	30.48 "
Hearst engine house.. . . .	97.70 "
Total contract.. . . .	92.26 "
Buildings.. . . .	92.57 "
Track scales and cinder hoists not yet started.	

Work remaining to be done consists principally of grading into new ballast pit at Mile 48; train-fill, 255,000 cubic yards; ballast, 105,000 cubic yards; concrete, corrugated iron pipes, telegraph line, and various small items, amounting in value to about \$490,000.

Buildings to complete, value about \$27,000

Tracklaying on the main line of this district was finished on November 17, 1913, when connection was made with the line east from Quebec at the first crossing of the Megiskin river, the boundary between District "C-D" and District "B." All track is now laid, with the exception of parts of sidings on contract No. 13, and three miles of track in Hearst division yard.

Ballasting is practically finished on contracts Nos. 14 and 15, and there remains about 27 per cent to do on contract No. 13, and 30 per cent on contract No. 16.

A great deal of extra train-filling was done this past summer, on contracts Nos. 13, 14 and 16, on account of sink holes developing. The filling of these caused a delay in the general work on all contracts. These were especially bad at Natagagan river, contract No. 13; Lavoie creek; Okikodasik river and Molesworth river, contract No. 14; and at mile 216 and 237, contract 16.

At Mile 237, about 6 miles west of Hearst, sink hole was so bad that an engine could not cross for two weeks. These settlements caused considerable delay to the work. However, all are up to grade at present, and I hope will stay so.

At Okikodasik river, the east abutment, behind which the fill had been made for eight months, suddenly slipped sideways toward the river, foundation piles and all, carrying with it an 80-foot girder. This has been temporarily replaced, and a steel viaduct will be erected the coming summer.

Telegraph line is practically complete on contracts Nos. 13, 14, and 15, but contractors on contract No. 16 have had considerable trouble keeping men on the work.

Culverts and bridge substructures: All concrete work is finished, with the exception of the First Megiskin crossing, contract No. 13; viaducts at Okikodasik and Departure creeks; and 100-foot girder at Little Mistongo, pile foundations for which are now going in.

All steel bridges are erected, except those noted above.

Water service: All tanks are erected, except the 70,000-gallon tank at O'Brien division yard, and the service is almost completed, except at that point.

The percentage of work done on the district is 96.34 per cent of the total.

Buildings: These include stations, section houses, freight sheds, icehouses, storehouses, and coal houses. John King is contractor for all buildings mentioned above, except storehouse at Cochrane.

Buildings on the district are 73.76 per cent complete.



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## FIRES AND ACCIDENTS.

A serious bush fire broke out along the line of contract No. 13 on the first day of July last, and we lost our Residency No. 8 buildings, near Bell river.

The general contractors lost their machine and repair shops and other buildings at Peter Brown Creek headquarters, and this loss caused some delay in the progress of the contract. Other fires occurred along the line, but nothing serious.

At Hearst, contract No. 16, we lost one of the Residency buildings by fire.

Very little sickness occurred amongst our staff or employees of the general contractors.

## STAFF.

The district office and field staffs were reorganized last April, and in December a general reduction in the field staff was made owing to the closing up of the work.

The police and medical services were generally satisfactory, no complaints being made.

I expect that the whole of the general contracts, and all buildings and other contracts, will be finished by November 30, 1914.

Yours truly,

T. S. ARMSTRONG,  
*District Engineer.*

## REPORT OF ENGINEER—DISTRICT "E."

JUNE 10, 1914.

GORDON GRANT, Esq.,  
Chief Engineer, National Transcontinental Railway,  
Ottawa, Ontario.

SIR,—In accordance with your circular of June 6, file 12,424, I beg to report on work done on District "E" during the fiscal year ending March 31, 1914.

## CONSTRUCTION.

This district covers three contracts: Contract No. 17 (100.26 miles), contract No. 18 (75 miles), and contract No. 19 "E" (19.64 miles). These extend from through Mileage 1233.37 to Mileage 1428.01, approximately.

*Contract No. 17.*—Messrs. M. P. & J. T. Davis, contractors; O'Brien, McDougall & O'Gorman, agents. This contract extends from district Mileage 60-160, actually being 100.26 miles.

Grading is 87 per cent complete, the balance being trainfill, one-third of which goes to Pagwachuan river.

Tracklaying is 82 per cent complete; main line laid, 100.26 miles; sidings, 12.95 miles; balance to lay, 8 miles in Grant division yard.

Ballasting is 48.04 per cent complete; all main line has first lift, and part of it second lift.

Culverts and small waterways, 94 per cent complete; all concrete work is finished, balance being corrugated pipes.

Permanent bridge substructures, 97 per cent complete; all concrete work is finished.

Water service is 40 per cent complete; work remaining to be done is principally in Grant division yard, which also includes sewerage.



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Steel tanks are all erected, 100 per cent complete.

Telegraph line is 25 per cent complete.

Grant engine house is 86 per cent complete.

Total contract is 83 per cent complete.

## BUILDINGS.

Buildings are 68 per cent complete.

Work remaining to be done consists principally of train-filling, approximately 632,000 cubic yards, of which 275,000 goes to Pagwachuan river crossing; ballasting 173,000 cubic yards; telegraph line, 60 miles; part of Grant division yard water and sewer service; some connections at other water stations on contract; 8 miles of track-laying in Grant division yard; and concrete floors, electric wiring, and plumbing in engine house, Grant division yard, the whole amounting to about \$700,000.

On buildings, there is still a little less than one-third to do, amounting to about \$50,000.

*Contract No. 18.*—E. F. & G. E. Fauquier, contractors; Nepigon Construction Co., agents. This contract, of approximately 75 miles, extends from District Mileage 160-235. Percentage of work done is as follows:—

	Complete.	
		per cent.
Grading (balance being train-fill) . . . . .	91	
Tracklaying . . . . .	99	"
Ballasting . . . . .	87	"
Culverts and small waterways . . . . .	99	"
Bridge substructures . . . . .	99	"
Water service (all steel tanks erected) . . . . .	94	
Telegraph line . . . . .	41.19	"
Total contract . . . . .	94	"
Buildings . . . . .	97.75	"

Work remaining to be done is principally train-fill, 380,000 cubic yards; ballasting, 32,000 cubic yards; and sundry small items, amounting altogether to about \$280,000.

Buildings, about \$6,000 will complete.

*Contract No. 19.*—O'Brien, Fowler & McDougall Bros., contractors. This contract, of 19.64 miles, extends from District Mileage 235 to 254.64. Percentage of work done is as follows:—

	Complete.	
		per cent.
Grading . . . . .	99	
Tracklaying (consisting of 19.64 miles main line and 9.9 miles of sidings) . . . . .	100	"
Ballasting . . . . .	98	"
Culverts . . . . .	98	"
Water service (70,000 gallons steel tank at Armstrong division yard erected) . . . . .	91	
Telegraph line . . . . .	99	"
Engine house . . . . .	98	"
Total contract . . . . .	96	"
Buildings . . . . .	90	"

Work remaining to be done consists of sundry items, amounting to about \$15,000. Buildings, about \$2,000 will finish.

## GENERAL.

Tracklaying on the main line was finished in 1912, with the exception of some main line sidings and sidings in division yards.

Ballasting and train-filling went on very slowly last year, partly owing to the late spring.



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There were also a number of sink holes developed, particularly at Mile 117 and Mile 167, which took a great deal of material, thus naturally delaying other work. These are now up to grade, and, I expect, will continue so.

All concrete culverts and bridge substructures are now finished.

All the large steel bridges and viaducts are now erected, but there are still some eight small girder spans to be placed. This will be done this coming summer.

The water service is practically completed, except at Grant division yard, and the connecting of pipe lines with tanks at water stations.

The telegraph line on the district is very backward. This was owing to labour conditions on contract No. 17, and to the wreck of contractor's tug on lake Nipigon, by which telegraph poles were brought from the south end of the lake, thus making delivery of same impossible for last year on contract 18.

Buildings include station buildings, trainmen's houses, icehouses, storehouses, section houses, tool houses, and freight sheds; and are about completed on this district, with the exception of some small stations which are under way.

The percentage of work done on the whole district is about 87 per cent of the total, and my opinion is that all work on the general and other contracts will be finished by November 30, 1914.

## STAFF.

Our district office was moved from Hearst to Cochrane, in November, and occupies the same building as District "C-D," thus making it more convenient, as well as economical.

Several Residencies are totally closed, and the remaining staffs were reduced for the winter months. The balance of the field staffs are employed in clearing off all office work ready for spring.

## CASUALTIES.

One of our ballast inspectors, Mr. John Gibson, was killed by falling off ballast train on September 8; cause unknown.

Medical and police service has been satisfactory.

Yours truly,

T. S. ARMSTRONG,  
*District Engineer.*

## REPORT OF DISTRICT ENGINEER—DISTRICT "F."

ST. BONIFACE, MAN., June 17, 1914.

GORDON GRANT, Esq.,  
Chief Engineer,  
Ottawa.

SIR,—I beg to report on the progress of work on District "F" for fiscal year ending March 31, 1914.

The uncompleted portions of the different contracts on this district remain the same as at date of my interim report to December 31, 1913, no work having been done during the winter months.

Following is a list of unfinished contracts, all of which it is expected will be completed during the coming summer:—

*Contract 21.*—Laying of approximately 15 miles of track and 50,000 cubic yards filling in Transcona yard; completion of yard layout at Redditt.



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*Contract 21A.*—Filling around Transcona shops, approximately 45,000 cubic yards remaining to be done.

Final estimate has been given contractor J. D. McArthur, on both above contracts, work to be completed by the Grand Trunk Pacific railway.

*Contract 72F.*—Station buildings, 99 per cent completed. Extension to water and sewerage systems at Redditt and Graham. Laying of eight additional tracks in Graham yard. Laying guard rails on Red river bridge and approaches. Completion of section house near crossing, Dundee branch, Canadian Northern railway, Transcona.

All of the foregoing, with the exception of contract 72F, to be done by the Grand Trunk Pacific railway.

Yours truly,

M. C. MACFARLANE,  
*District Engineer.*

## REPORT OF BRIDGE ENGINEER.

OTTAWA, June 26, 1914.

GORDON GRANT, Esq.,  
Chief Engineer.

SIR,—In reply to your letter of 6th instant, file 12, 424, I hand you herewith, in quadruplicate, our annual statement of the amounts paid on account of steel bridges to March 31, 1914.

Your very truly,

R. F. UNIACKE,  
*Bridge Engineer.*



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## STATEMENT showing Approximate cost of Steel Bridges and amounts paid on Contracts to March 31, 1914.

## DISTRICT "A."

Name.	Through Mileage.	Description.	Contractor.	Estimated Weight of steel in pounds.	Rate per lb. F. B. M.	Timber F. B. M.	Rate per M ft. B. M.	Total estimated cost of super-structure.	Paid to March 31, 1914.	Per centage of work completed.
					cts.		\$ cts.	\$ cts.	\$ cts.	Per cent
Over Ning Highway ... Canaan River Viaduct.	8 5 21 70	1-18' dk. pl. gr. span. .... 5-30', 5-60', 1-80' dk. pl. gr. spans and 5 towers 30' span.	Dominion Bridge Co. ....	13,409	4 375	5,167	47 00	834 19	834 19	100
Over Ning Red Bank Rd. Salmon River (Chipman).	54 60 57 00	1-66' thro. pl. gr. span. .... 4-40', 4-60', 2-80' dk. pl. gr. spans and 4 towers 40' span and 4-150' dk. truss spans.	Canada Foundry Co. .... Dominion Bridge Co. ....	848,133 110,097	4 50 4 375	73,250 10,935	47 00 47 00	41,608 73 5,330 68	41,608 73 5,330 68	100 100
Over Ning Salmon R. Rd. ....	57 50 67 00	1-21' 4" dk. pl. gr. span. .... 4-40', 6-60' dk. pl. gr. spans, 4 towers 40' span and 1 rocker bent. ....	Canada Foundry Co. .... W. P. McNeil. ....	2,178,372 27,050	4 65 4 34	154,110 5,213	47 00 51 00	108,537 47 1,439 83	108,537 47 1,439 83	100 100
Gains River. S. W. Miramichi. .... N. B. S. W. Miramichi. Juniper Brook. .... Odell Brook. .... Tobique River. ....	82 00 124 50 133 00 134 07 150 00 165 20	1-80' dk. pl. gr. span. .... 1-175' thro. truss span. .... 1-125' thro. truss span. .... 1-44' thro. pl. gr. span. .... 1-44' thro. pl. gr. span. .... 3-140' dk. trusses, 2-100' and 1-80' dk. pl. gr. spans. ....	Structural Steel Co. .... W. P. McNeil. .... Dominion Bridge Co. .... " .... W. P. McNeil. .... " ....	1,030,095 93,570 491,911 292,759 53,500 70,700	3 95 3 96 4 17 4 17 4 00 4 00	72,020 12,917 21,983 18,100 7,745 7,060	37 00 45 00 47 00 47 00 45 00 45 00	42,168 50 4,339 88 21,545 89 13,058 75 2,488 52 3,145 70	42,168 50 4,339 88 21,545 89 13,058 75 2,488 52 3,145 70	100 100 100 100 100 100
Over Ning Highway ... Graham Brook. ....	165 70 180 70	1-22' 7' dk. pl. gr. span. .... 3-60', 3-50' and 5-40' dk. pl. gr. spans and 5 towers 40' span	Canada Foundry Co. .... Dominion Bridge Co. ....	1,471,866 16,344	4 38 4 94	91,504 5,588	46 00 52 00	68,676 91 1,097 97	68,676 91 1,097 97	100 100
Caton Brook. ....	181 80	11-60', 10-40' dk. pl. gr. spans and 10 towers 40' span. ....	" ....	998,840	4 34	70,130	52 00	46,996 42	46,996 42	100
Under Ning Foley Brook Road. ....	182 90 184 70	3-22' 1 Beams spans. .... 25-100' 3", 24 58' 9" thro. pl. gr. spans and 24 towers 58' 9" span. ....	" .... " ....	2,397,478 31,134	4 34 4 89	140,562 6,850	52 00 52 00	111,359 77 1,878 65	111,359 77 1,878 65	100 100
Under Ning Falls Brook Road. ....	190 00 192 00	1-99' Pony truss span. .... 11-40', 9-60', 2-80' and 1 100' dk. pl. gr. spans and 11 towers 40' span. ....	" .... " ....	72,866	4 94	10,476	52 00	4,144 33	4,144 33	100
Little River. ....	197 60	6-30', 1-59' 7", 5-60', 1-75' dk. pl. gr. spans and 6 towers 30' span	Structural steel Co. ....	2,529,396	3 95	167,284	37 00	106,250 65	106,250 65	100
Four Mile Brook. ....			W. P. McNeil. ....	1,055,359	4 34	96,700	40 00	49,670 58	51,710 53	100



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Grand River.....	207-80 2-88' thro. pl. gr. spans	"	312,222	3-94	25,840	42 00	13,386 83	13,386 83	100
Sigas River.....	209-80 1-80' dk. pl. gr. span.	"	94,028	3-89	12,917	42 00	1,200 20	4,200 20	100
Quisibis River.....	213-80 1-99' thro. pl. gr. span.	Dominion Bridge Co.	191,778	4-39	15,422	47 00	9,143 88	9,143 88	100
Green River.....	220-90 2-77' thro. pl. gr. spans.	W. P. McNeil	246,239	4-07	22,343	42 00	10,960 33	10,968 28	100
Troquois River.....	227-80 1-66' thro. pl. gr. span.	Dominion Bridge Co.	98,949	4-39	11,256	47 00	4,872 89	4,872 89	100
Madawaska River.....	230-20 1-99' and 1-83' 6" thro. pl. gr. spans	"	337,233	4-39	26,179	47 00	16,034 94	16,034 94	100
Over Ning Ferry Rd.	230-30 1-33' thro. pl. gr. span.	"	33,473	4-625	6,610	47 00	1,858 80	1,858 80	100
Baker Brook.....	243-80 1-80' dk. pl. gr. span	W. P. McNeil	93,590	3-89	12,917	42 00	4,183 16	4,183 16	100
Under Ning Highway Baker Lake.....	251-50 1-40' thro. pl. gr. span	Dominion Bridge Co.	20,000	4-94	3,700	52 00	1,180 40	1,037 87	99

DISTRICT "B" - EAST.

Kitchen Brook.....	257-15 1-33' thro. pl. gr. span.	Dominion Bridge Co.	33,924	4-15	4,452	52 00	1,764 10	1,588 47	98
Narrows Lac Long. Blue River.....	265-45 1-66' thro. pl. gr. span.	"	98,733	3-97	8,020	52 00	4,465 20	4,188 63	98
	277-45 4-80' dk. pl. gr. spans and 1-150' dk. truss span.	"	797,424	4-34	59,072	48 00	37,443 65	37,443 65	100
Nigger Brook.....	283-45 1-55' thro. pl. gr. span.	"	71,774	4-15	6,998	52 00	3,342 52	3,342 52	100
St. Francis River.....	286-45 2-55', 1-99' thro. pl. gr. spans.	"	414,232	4-29	24,628	52 00	19,051 21	19,051 21	100
Boucenne River.....	293-25 1-150' dk. truss, 4-60', 3-56', 2-40', 5-30' dk. pl. gr. spans	"							
	5 towers 30' span and 2 towers 40' span.	"							
Roche River.....	300-95 1-35' dk. pl. gr. span.	"	1,831,938	4-56	100,838	52 00	89,091 95	89,091 95	100
Main Fourche River.....	305-80 1-30' dk. pl. gr. span.	"	27,694	3-95	4,576	52 00	1,331 86	1,331 86	100
Little Black River.....	312-95 1-55' thro. pl. gr. span.	"	22,549	3-95	4,376	52 00	1,118 23	1,118 23	100
Manic River.....	316-95 1-50' dk. pl. gr. span.	Dom. Br. Co.	72,172	4-15	7,094	52 00	3,364 03	3,364 03	100
River du Loup.....	323-45 2-60' & 1-80' dk. pl. gr. span.	W. P. McNeil	50,531	3-95	7,398	52 00	2,380 68	2,380 68	100
River au Chaud.....	332-70 1-60' dk. pl. gr. span.	"	225,066	4-20	30,134	52 00	11,012 20	11,012 20	100
Outlet Lake Therrien.....	361-15 1-77' through pl. gr. span.	"	60,364	4-06	7,878	52 00	2,860 44	2,860 44	100
Bras d'Apic E. Br.....	369-15 1-60' dk. pl. gr. span.	"	122,900	4-25	9,326	52 00	5,695 91	5,695 91	100
Bras d'Apic W. Br.....	370-15 1-60' dk. pl. gr. span.	"	60,600	4-06	7,960	52 00	2,874 28	2,874 28	100
Mechant Pouce.....	375-15 1-60' dk. pl. gr. span.	"	60,600	4-06	7,960	52 00	2,874 28	2,874 28	100
Fortins Creek.....	375-95 1-60' dk. pl. gr. span.	"	60,620	4-06	8,181	52 00	2,886 74	2,886 74	100
Bras St. Nicholas.....	380-45 1-33' through pl. gr. span.	"	60,600	4-06	7,960	52 00	2,874 28	2,874 28	100
Fourche du Pin.....	396-45 2-70' dk. pl. gr. & 1-125' dk. truss spans.	"	34,504	4-26	4,550	52 00	1,710 30	1,710 30	100
Aboukias River.....	415-25 1-100' & 2-60' dk. pl. gr. spans	Dom. Br. Co.	473,504	4-47	33,453	52 00	22,905 19	22,905 19	100
Etechemin River.....	421-08 2-100' & 2-70' dk. pl. gr. spans	W. P. McNeil	277,000	4-27	31,983	48 00	13,363 08	13,363 08	100
Over Ning Q. C. Ry.....	433-90 1-66' through pl. gr. span.	Dom. Br. Co.	451,941	4-72	48,672	55 00	24,008 72	24,008 72	100
River le Bars.....	446-61 1-66' through pl. gr. span.	"	110,968	4-72	11,185	55 00	5,869 37	5,869 37	100
		"	100,382	4-72	8,119	55 00	5,426 90	5,426 90	100
		"	45,720	0-53					
Creek Ning M. B. 2.....	447-25 1-40' dk. pl. gr. span.	"	31,771	4-70	5,382	53 00	1,778 49	1,778 49	100
Under Ning L. R. C.....	457-88 1-88' through pl. gr. span.	"	158,008	4-72	15,465	55 00	8,198 56	8,198 56	100
Highway Viaduct Mile 2-17.....	458-28 1-50' & 2-40' dk. pl. gr. spans.	"	66,110	4-72	12,362	55 00	3,800 29	3,800 29	100



5 GEORGE V., A. 1915

STATEMENT showing approximate cost of Steel Bridges and amounts paid on contracts to March 31, 1914—Continued.

DISTRICT "B"—WEST.

Name.	Through Mileage.	Description.	Contractor.	Estimated weight of steel in pounds.	Rate per lb.	Timber F.B.M.	Rate per M. ft. B. M.	Total estimated cost of super- structure.	Paid to March 31, 1914.	Per- centage of work com- pleted.
					cts.		\$ cts.	\$ cts.	\$ cts.	
Cap Rouge Highway	463.05	1-89' 2" through truss swing	Dom. Br. Co.					2,200 00	2,200 00	100
Cap Rouge Viaduct	463.05	32-40', 27-51' dk. pl. gr. spans, 1-125', 1-150', 1-160' dk. truss spans, 30 towers 40' span & 1 rocker bent	"	8,456,297	3.94	613,122	42 00	3,58,929 22	362,329 22	100
River aux Pommes	479.95	1-50' dk. pl. gr. span	"	46,373	4.04	9,378	47 00	2,314 24	2,314 24	100
Jacques Cartier R.	482.45	2-30', 2-60', 1-80' dk. pl. gr. spans, 1-100' dk. truss 2 towers, 30' span & 1 rocker bent	"							
Portneuf River	489.35	2-60' & 1-100' dk. pl. gr. spans	"	832,881	4.19	50,040	50 00	37,399 71	38,259 71	100
Grand Bras d'Arme	499.35	1-40' dk. pl. gr. span	"	265,430	4.09	31,429	47 00	12,332 83	12,332 83	100
Lachevrotiere River	500.35	1-33' through pl. gr. span	"	33,278	4.44	5,442	52 50	1,763 25	1,763 25	100
Ste. Anne River	503.95	2-70' & 1-100' dk. pl. gr. spans	"	33,431	4.84	4,574	52 50	1,858 20	1,858 20	100
River Noire	505.95	2-50' dk. pl. gr. spans & 1-125' dk. truss span	"	443,280	4.09	45,044	47 00	20,247 22	20,247 22	100
Nigerotte River	506.45	1-30' dk. pl. gr. span	"	358,920	4.18	28,625	47 00	16,318 23	18,603 93	100
Charest River	511.15	4-30', 1-45', 3-60', 1-75' dk. pl. gr. spans & 4 towers 30' span	"	20,731	4.44	4,040	52 50	1,132 56	1,132 56	100
Batiscan River	525.75	2-40' 3-60' dk. pl. gr. spans 2- 100', 1-200' dk. truss spans & 2 towers 40' span	"	641,728	3.95	57,342	50 00	28,215 36	34,109 33	100
Batiscan R., W. Span	525.75	1-80' dk. pl. gr. span	"	1,396,453	4.23	101,302	50 00	64,135 06	64,135 06	100
Over Xing Highway	531.25	3 skewed spans	"	96,231	4.83	12,412	55 00	5,330 62	5,330 62	100
Tawachiche River	543.45	1-44' through pl. gr. span	"	33,277	4.72	7,200	47 00	1,909 07	1,909 07	100
Roberge Creek	545.45	1-40 0 to 0 D. T. through pl. gr. span	"	51,425	4.84	8,338	52 50	2,926 72	2,926 72	100
R. des eaux Mortes	555.45	1-125' dk. truss span	"	95,405	4.84	14,796	52 50	5,442 79	5,442 79	100
River du Millieu	557.45	5-40', 6-60', 3-75', 2-90' dk. pl. gr. spans, 1-225' dk. truss span 2 towers, 60' span & 5 towers 40' span	"	364,336	5.12	18,100	52 50	19,604 25	19,604 25	100
1st Xing Brochet R.	559.45	1-60' dk. pl. gr. span	"	3,409,062	4.93	163,570	52 50	176,654 17	176,654 17	100
2nd "	561.95	1-55' through pl. gr. span	"	58,995	4.44	10,164	52 50	3,152 99	3,152 99	100
3rd "	562.45	1-55' through pl. gr. span	"	72,868	4.44	9,320	52 50	3,724 64	3,774 64	100
			"	72,324	4.44	9,320	52 50	3,700 49	3,750 49	100



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4th Xing Brechet R.	568-95 1-33' thro. pl. gr. span.	Dom. Br. Co.	33,387	4 44	6,968	52 50	1,848 20	1,848 20	100
5th " " "	570-05 1-36' 10" o to o thro. pl. gr. span.	"	60,789	4 41	6,220	52 50	3,025 58	3,025 58	100
Creek a Beauce.....	575-45 1-40' dk. pl. gr. span.	"	32,533	4 41	7,696	52 50	1,848 51	1,848 51	100
Over Xing Q. & L. St.									
J. Ry.	578 70 1-76' o to o thro. pl. gr. span.	"	120,032	4 84	11,310	52 50	6,401 90	6,401 90	100
Little Bastonnais R.	579 95 2-60' & 1-100' dk. pl. gr. spans	"	319,486	4 84	35,230	52 50	16,877 10	16,877 10	100
Big Bastonnais River.	585 15 4-90' dk. pl. gr. spans.	"	519,204	4 84	51,882	52 50	27,853 28	27,853 28	100
Croche River	588 15 4-90' skewed thro. pl. gr. spans	"	674,266	4 84	41,027	52 50	34,788 39	34,788 39	100
1st Xing St. Maurice	589-05 6-140' thro. truss spans	"	1,951,535	4 98	116,080	52 50	103,280 61	103,280 61	100
River au Lait	589 35 1-77' thro. pl. gr. span.	"	122,719	4 84	12,450	52 50	6,593 22	6,593 22	100
Vermillion River	605 45 3-40', 2-60', 1-80' dk. pl. gr. spans, 2-125', 2-225' dk. truss spans & 3 towers 40' span	"	2,744,995	4 22	139,922	48 00	122,555 65	122,555 65	100
Flamand River	626-45 1-175' thro. truss span	"	517,573	4 43	24,124	51 00	24,158 80	24,158 80	100
Little Flamand River.	634-95 2-55' & 1-99' thro. pl. gr. spans	"	341,009	4 27	26,685	51 09	15,922 02	15,922 02	100
2nd Xing St. Maurice River.....	648-45 3-200' skewed thro. truss spans	"	1,981,574	4 27	75,768	51 00	88,477 37	88,477 37	100
3rd Xing St. Maurice River.....	655 85 3-200' skewed thro. truss spans	"	1,957,375	4 27	74,006	51 00	87,354 22	87,354 22	100
Manuan River	657-63 3 180' skewed thro. truss spans	"	1,637,351	4 27	66,890	51 00	73,326 28	73,326 28	100
1st Xing Ribbon R.	658-33 2-150' thro. truss spans	"	776,470	4 30	37,196	51 00	35,285 20	35,285 20	100
Atikmahik Creek.....	662 33 8-60', 7-30' dk. pl. gr. spans & 7 towers 30' span	"	985,457	4 22	91,875	51 00	12,566 91	12,566 91	100
Minachin Creek..	679 95 1-44' thro. pl. gr. span	"	52,419	4 39	5,978	54 00	2,624 00	2,624 00	100
2nd Xing Ribbon R.	681-55 1-150' thro. truss span	"	389,724	4 50	18,898	50 00	18,482 48	18,482 48	100
Picqui Creek	685-55 1-60' dk. pl. gr. span.	"	62,525	4 14	8,101	53 00	3,017 89	3,017 89	100
Lake Travers.....	687-13 2-77' thro. pl. gr. spans	"	283,376	4 29	18,640	53 00	13,144 74	13,144 74	100
Upper Ribbon River...	689-13 1-99' thro. pl. gr. span.	"	226,188	4 29	12,024	53 00	10,340 72	10,340 72	100
Boucher Creek.....	696-15 1-44' thro. pl. gr. span.	"	51,864	4 30	5,864	53 00	2,540 94	2,540 94	100
Gatineau R. E. Br.	706-17 2-70' dk. pl. gr. spans	"	154,533	4 34	18,402	54 00	7,700 44	7,700 44	100
Marten River..	710-27 9-55', 8-30', dk. pl. gr. spans & 8 towers 30' span	"	998,420	4 32	98,209	54 00	48,435 02	48,435 02	100
Little Pitch Pine Cr....	718-47 1-70' & 2-35' dk. pl. gr. spans	"	129,397	4 17	16,464	53 00	6,268 43	6,268 43	100
East Cache Creek	736-67 1-80' & 2-40' dk. pl. gr. spans	"	157,775	4 18	18,704	53 00	7,586 30	7,586 30	100
Ouelanco River...	739-17 1-50' & 2-40' dk. pl. gr. spans	"	109,142	4 19	13,568	53 00	5,292 16	5,292 16	100
Haycock Creek	744-47 1-70' dk. pl. gr. span	"	75,636	4 19	8,400	53 00	3,614 34	3,614 34	100
DISTRICT NO.									
Susie River	765-03 1-90' dk. pl. gr. span	Dom. Br. Co.	124,000	4 30	12,900	53 00	6,015 70	3,763 44	61
Dead Fox Creek	773-23 1-55' thro. pl. gr. span.	Can. Br. Co.	72,000	5 49	7,500	55 00	1,300 00	1,964 40	45
Kekek River.	776-37 1-77' thro. pl. gr. span.	Can. Fdy. Co	119,000	5 35	9,900	50 00	6,861 00	3,429 48	50



5 GEORGE V., A. 1915

STATEMENT showing approximate cost of Steel Bridges and amounts paid on Contracts to March 31, 1914—Continued.

Name.	Through Mileage.	Description.	Contractor.	Estimated weight of steel in pounds.	Rate per lb.	Timber F.B.M.	Rate per M. ft. B.M.	Total estimated cost of super- structure.	Paid to March 31, 1914.	Per- centage of work com- pleted.
					cts.		\$ cts.	\$ cts.	\$ cts.	
Mamagush River . . . . .	784-13	1-80', 5-60', 4-40' dk. pl. gr. spans 4-40' towers & 1 rock- er bent. . . . .	Can. Br. Co. . . . .	733,561	5-12	73,320	55 00	41,581 48	40,192 41	97
Durant Lake . . . . .	791-43	1-30' dk. pl. gr. span. . . . .	Can. Pdy. Co. . . . .	21,000	5-33	4,200	50 00	1,329 20	666 00	50
1st Ning Atik River. . . . .	795-63	1-80' dk. pl. gr. span. . . . .	" . . . . .	94,000	5-24	11,700	50 00	5,510 60	2,613 00	47
2nd " . . . . .	800-93	1-80' & 2-50' dk. pl. gr. spans	" . . . . .	187,000	5-14	23,560	50 00	10,789 80	5,100 00	47
3rd " . . . . .	804-03	1-80' & 2-60' " . . . . .	" . . . . .	212,000	5-14	28,560	50 00	12,324 80	6,766 72	55
4th " . . . . .	807-33	1-80' & 2-60' " . . . . .	" . . . . .	212,000	5-15	28,560	50 00	12,324 80	5,730 00	45
Canyon Creek . . . . .	812-53	1-80', 5-60', 4-40' dk. pl. gr. spans 4-40' towers & 1 rock- er bent. . . . .	Can. Br. Co. . . . .	784,500	5-12	72,000	55 00	44,126 40	43,066 01	98
1st Ning Megiskan R. . . . .	819-53	2-125' dk. truss & 2-100' dk. pl. gr. spans . . . . .	H. B. W. Co. . . . .	876,900	5-18	60,540	51 00	48,510 96	35,975 88	71
Sunday River . . . . .	830-57	1-125' thro. truss span. . . . .	Don. Br. Co. . . . .	290,000	4-87	15,400	53 00	14,939 20	8,988 15	60
2nd Ning Megiskan R. . . . .	834-83	2-60' dk. pl. gr. & 1-250' thro. truss spans. . . . .	H. B. W. Co. . . . .	1,087,000	5-18	47,100	51 00	58,708 70	54,701 23	93
Bell River. . . . .	844-23	2-60' dk. pl. gr. & 1-160' thro. truss spans. . . . .	Don. Br. Co. . . . .	561,000	5-57	24,800	54 00	32,586 90	13,745 50	42
Cedar Creek. . . . .	855-83	1-39' dk. pl. gr. span. . . . .	Can. Br. Co. . . . .	33,000	5-00	6,700	55 00	2,018 50	975 15	48
Natagan River. . . . .	867-73	1-70' dk. pl. gr. span. . . . .	" . . . . .	75,000	5-00	9,200	55 00	4,256 00	2,211 00	52
Peter Brown Creek . . . . .	878-99	1-100' & 2-40' dk. pl. gr. spans	" . . . . .	209,000	4-68	25,400	54 00	11,152 80	11,288 27	100
Harricanaw River . . . . .	887-93	1-300' thro. truss & 2-70' dk. pl. gr. spans. . . . .	" . . . . .	1,348,400	4-93	69,900	54 00	70,250 72	73,250 64	100
Nawapitichin Forks. . . . .	904-73	4-60', 3-40' dk. pl. gr. spans and 3-40' towers. . . . .	" . . . . .	403,000	4-96	48,000	54 00	22,580 80	25,351 44	100
Deer River . . . . .	913-83	1-66' thro. pl. gr. span. . . . .	" . . . . .	96,000	4-96	8,800	54 00	5,236 80	5,285 63	100
Robertson Lake. . . . .	915-13	1-77' thro. pl. gr. span. . . . .	" . . . . .	119,000	4-96	10,000	54 00	6,442 40	6,422 60	100
Kakameconan River. . . . .	922-63	1-90' & 2-50' dk. pl. gr. spans	" . . . . .	216,400	4-64	25,600	54 00	11,423 36	11,447 27	100
Molesworth River. . . . .	931-13	1-150' thro. truss, 1-90' & 1-40' dk. pl. gr. spans. . . . .	" . . . . .	519,000	4-96	36,800	54 00	27,729 60	27,921 87	100
3rd Ning South River. . . . .	940-83	1-59' o to o dk. pl. gr. span. . . . .	" . . . . .	56,000	4-72	7,500	54 00	3,048 26	1,953 50	64
Whitchish River. . . . .	942-13	1-275' thro. truss span. . . . .	" . . . . .	1,115,776	4-93	33,623	54 00	56,823 40	56,823 40	100
Okikodask River . . . . .	956-73	1-200' thro. truss & 1-80' dk. pl. gr. spans . . . . .	" . . . . .	715,200	4-88	34,300	54 00	36,753 96	41,769 72	100
Okikodask River . . . . .	956-73	2-65', 7-50', 6-40' dk. pl. gr. spans 6-40' towers and 1 rocker bent. . . . .	" . . . . .	745,600	4-93	95,000	55 00	41,983 08	12,802 98	30



DISTRICT "D."

Departure Creek.....	972-12	2 80', 1-60', 3-50', 5-40' dk. pl. gr. spans 5-40' towers.....	Can. Br. Co.....	644,600	4-93	78,000	55 00	36,068 78	8,696 00	24
Circle River.....	987-37	1-200' thro. truss span.....	"	616,284	4-35	24,081	50 00	28,012 40	28,012 40	100
Low Bush River.....	987-62	1-200' thro. truss span.....	"	617,888	4-35	24,081	50 00	28,082 18	28,082 18	100
Little Mistongo R.....	994-32	1-100' dk. pl. gr. span.....	"	149,000	4-93	14,000	55 00	8,115 70	2,664 26	33
Mistongo River.....	1,002-12	11 30', 11-60', 1-80' dk. pl. gr. spans & 11 towers 30' span.....	H. B. W. Co.....	1,785,239	3-58	145,120	51 00	71,312 67	71,312 67	100
Sucker Creek.....	1,010-62	1-30' dk. pl. gr. span.....	"	23,350	4-75	6,350	58 00	1,477 43	1,441 37	98
Abitibi River.....	1,020-15	4-30', 2-57'-10", 3-60', dk. pl. gr. spans 2-210' dk. truss spans 4 towers 30' span & 1 rocker bent.....	"	2,270,526	3-86	114,100	50-50	93,404 35	93,404 35	100
Brule Creek M. 99.....	1,024-12	1-60' dk. pl. gr. span.....	"	61,900	4-70	10,440	51 00	3,441 80	3,441 80	100
Frederichouse R.....	1,034-41	3-40', 5-60' dk. pl. gr. spans 1-200' dk. truss span & 3 towers 40' span.....	"	1,341,480	4-60	88,251	51 00	66,055 88	66,055 88	100
Buckegow River.....	1,038-60	2-60' & 1-90' dk. pl. gr. spans	"	255,110	4-60	30,550	51 00	13,293 11	13,293 11	100
Driftwood River.....	1,048-62	2-50' & 1-100' dk. pl. gr. spans	"	255,173	4-60	29,432	51 00	13,238 99	13,238 99	100
Mattagamia River.....	1,060-12	2 260' thro. truss spans.....	Can. Br. Co.....	2,018,062	4-30	67,201	50 00	90,136 72	90,136 72	100
Poplar Rapids River.....	1,066-62	2-50' & 1-70' dk. pl. gr. spans	H. B. W. Co.....	183,005	4-55	24,414	53 00	9,620 67	9,620 67	100
Wellington Creek.....	1,074-37	1-70' dk. pl. gr. span.....	"	80,213	4-55	11,528	53 00	4,260 67	4,260 67	100
Ground Hog River.....	1,078-62	2 250' thro. truss spans.....	Can. Br. Co.....	1,934,180	4-57	63,264	54 00	91,808 29	91,808 29	100
Brule Creek M. 156.....	1,081-12	1 55' thro. pl. gr. span.....	H. B. W. Co.....	74,055	4-75	9,333	58 00	4,058 92	4,058 92	100
Martin Creek.....	1,083-12	1-35' dk. pl. gr. span.....	"	26,100	4-75	7,200	58 00	1,657 32	1,655 82	100
Bass River.....	1,093-72	1 55' thro. pl. gr. span.....	Can. Br. Co.....	75,300	4-96	7,301	54 00	4,129 13	4,129 13	100
Kapuskasing R. E. Br.....	1,098-12	3-100' dk. pl. gr. spans.....	"	456,373	4-55	41,307	54 00	22,995 55	22,995 55	100
Kapuskasing R. W. Br.....	1,098-12	2-100' dk. pl. gr. spans.....	"	297,966	4-55	27,607	54 00	15,048 23	15,048 23	100
Lost River.....	1,106-72	1-100' dk. pl. gr. span.....	"	147,966	4-51	14,051	54 00	7,579 98	7,579 98	100
Solomon Creek.....	1,112-12	1-30' dk. pl. gr. span.....	"	20,732	4-82	4,327	54 00	1,232 94	1,232 94	100
Opazatika River.....	1,119-12	1-200' thro. truss span.....	"	619,328	4-93	24,983	54 00	31,881 95	31,881 95	100
Montcalm Creek.....	1,123-42	1 44' thro. pl. gr. span.....	"	74,722	4-96	4,831	54 00	3,967 08	3,967 08	100
Crow Creek.....	1,129-12	1-44' thro. pl. gr. span.....	"	53,690	4-96	5,825	54 00	2,977 57	2,977 57	100
Missinabi River.....	1,138-82	7-100' & 2-80' dk. pl. gr. spans	H. B. W. Co.....	1,300,648	4-41	116,722	54 50	63,719 92	63,719 92	100
Mellwarth Creek.....	1,154-12	1-50' dk. pl. gr. spans.....	Can. Br. Co.....	46,929	4-76	6,942	54 00	2,608 69	2,608 69	100
Nelles Creek.....	1,154-62	1-40' dk. pl. gr. span.....	"	31,692	4-76	5,702	54 00	1,816 45	1,816 45	100
Mattawishquan River.....	1,155-87	2-40' 2-90' & 1-100' dk. pl.....	"	458,355	4-61	49,484	54 00	23,802 31	23,802 31	100
Valentine Creek.....	1,172-12	2 50' & 1-80' dk. pl. gr. spans	"	184,300	4-68	23,500	54 00	9,894 24	9,664 92	98

DISTRICT "E."

St. Joseph River.....	1175-10	1-44' thro. pl. gr. pl. gr. span.....	Can. Br. Co.....	51,000	4-50	6,750	52 00	2,646 00	2,208 24	75
Kebimugami River.....	1177-85	1-150', 1 125' dk. truss spans 5-60', 2 30' dk. pl. gr. spans, 2 30' dk. towers and 1 rocker bent.....	H. B. W. Co.....	1,157,000	4-55	80,000	53 00	56,883 50	61,192 70	100



STATEMENT showing approximate cost of Steel Bridges and amounts paid on Contracts to March 31, 1914—Continued.  
DISTRICT "F"—Continued.

Name.	Through Mileage.	Description.	Contractor.	Estimated weight of steel in pounds.	Rate per pound.	Timber ft. B.M.	Rate per M feet B.M.	Total estimated cost of super-structure.	Paid to March 31, 1914.	Per-centage of work com-pleted.
					cts.		\$ cts.	\$ cts.	\$ cts.	
Creek Mile 15.5	1188 35	1-33' thro. pl. gr. span.	"	33,000	4 55	5,300	53 00	1,782 40	1,798 41	100
Creek Mile 17 21	1190 06	1-33' thro. pl. gr. span.	"	33,000	4 55	5,300	53 00	1,782 40	1,798 41	100
White River	1195 85	2-100' & 2-50' dk. pl. gr. spans.	"	390,400	4 25	44,500	53 00	18,950 50	19,846 60	100
Skunk River	1196 55	2-100', 3-60', 5-40' dk. pl. gr. spans & 4-40' towers.	"	940,000	4 55	77,900	53 00	46,898 70	52,064 13	100
Nagagami River.	1197 70	2-100', 1-60', 3-50' dk. pl. gr. spans & 5-30' towers	"	925,000	4 55	75,100	53 00	46,067 80	49,719 49	100
Nagagami Branch.	1206 75	2-60' dk. pl. gr. & 1-125' dk. truss spans.	Can. Br. Co.	410,000	4 50	30,700	52 00	20,046 40	20,117 93	95
Bad River.	1214 85	1-125' thro. truss & 2-50' dk. pl. gr. spans	H. B. W. Co	383,000	4 75	29,400	54 00	19,730 10	20,893 10	100
Martin Creek.	1220 74	1-55' thro. pl. gr. span.	Can. Br. Co	72,000	4 55	9,700	52 00	3,780 40	3,724 96	100
Clarke Creek	1227 35	1-40' dk. pl. gr. span.	H. B. W. Co	30,000	4 40	5,700	54 00	1,627 80	1,716 97	100
Pagwachuan River	1233 85	1-150' dk. truss span, 2-100', 1-80', 1-60' & 1 40' dk. pl. gr. spans.	Can. Br. Co.	907,000	4 75	65,800	52 00	46,504 10	47,156 51	98
Midway Creek	1237 85	1-44' thro. pl. gr. span	"	51,000	4 75	6,750	52 00	2,646 00	2,635 60	98
Dog River	1242 15	1-100' dk. pl. gr. span.	H. B. W. Co.	149,000	4 35	14,300	54 00	7,253 70	7,716 21	98
Malaffy Creek	1245 02	1-44' thro. pl. gr. span.	Can. Br. Co	51,000	4 50	6,750	52 00	2,646 00	2,636 69	98
Moose River	1248 75	1-90' dk. pl. gr. span.	H. B. W. Co.	124,000	4 35	12,900	54 00	6,690 60	6,480 83	98
Flint River.	1250 93	1-99' thro. pl. gr. span.	"	200,000	4 50	13,000	54 00	9,702 00	9,425 88	98
Black Creek.	1254 11	1-44' thro. pl. gr. span.	Can. Br. Co.	51,000	4 50	6,750	52 00	2,646 00	2,637 34	98
Kenogami River	1259 15	4-65', 1-30' dk. pl. gr. spans, 2-125' dk. truss spans & 1-30' tower.	"	906,000	4 55	69,200	52 00	44,821 40	45,268 81	98
Decaire Creek	1267 55	1-33' thro. pl. gr. span.	"	34,000	5 12	7,200	52 00	2,115 20	1,242 65	60
Rabbutt Creek	1274 42	1-90' dk. pl. gr. span.	"	124,000	4 75	12,900	52 00	6,560 80	4,340 70	66
Beaver Creek	1285 80	1-40' dk. pl. gr. span	"	30,000	4 89	5,700	52 00	1,763 40	1,166 72	66
Twin River.	1294 55	1-106' dk. pl. gr. span.	"	149,000	4 75	14,300	52 00	7,821 10	4,406 25	56
McDonald Creek, E.Br.	1297 70	1-66' thro. pl. span.	"	96,000	4 95	8,000	52 00	5,168 00	2,734 51	51
McDonald Creek, W.Br.	1299 04	1-40' dk. pl. gr. span.	"	30,000	4 89	5,700	52 00	1,763 40	933 75	53
Kawashkagama River.	1317 25	2-30' dk. pl. gr. spans & 1-160' thro. truss span.	"	412,000	5 18	26,500	52 00	22,719 60	13,672 80	60
Trout Creek	1318 25	1-44' thro. pl. gr. span.	"	51,000	5 10	8,400	52 00	3,037 80	1,570 59	50
Johnson Creek	1323 25	1-77' thro. pl. gr. span.	"	119,000	4 95	12,400	52 00	6,535 30	3,304 75	50
Emilie Creek	1345 35	1-44' thro. pl. gr. span.	Can. Fdy. Co.	51,000	4 60	8,400	54 00	2,799 60	1,529 19	55
Spruce Creek.	1349 85	1-55' thro. pl. gr. span.	"	72,000	4 60	9,700	54 00	3,835 80	2,109 90	55
Ombabika River.	1356 57	1-66' thro. pl. gr. span.	"	96,000	4 60	8,900	54 00	4,896 60	3,315 49	68
Jackfish River	1381 17	1-100', 6-60', 5-40' dk. pl. gr. spans, 5-10 towers & 1 rock-er bent.	"	1,035,000	4 55	90,000	54 00	51,952 50	52,347 16	98



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Mud River ..	1388 00 1 90' 3 60' 3 30' dk. pl. gr. spans & 3 towers 30' span..	"	161,500	4 60	47,800	54 00	23,810 20	24,794 45	98
Rapid Creek ..	1397 45 1 55' thro. pl. gr. span..	"	72,000	4 60	9,700	54 00	3,835 80	2,094 96	54
White Sand River. . .	1404 42 1 99' thro. gl. gr. span..	"	184,000	4 60	13,000	54 00	9,166 00	5,605 50	61
District "E"									
Lookout River	1448 84 1 99' thro. pl. gr. span.	Can. Fdy. Co	184,000	4 80	13,100	54 00	9,539 40	5,552 52	58
Alan Water ..	1467 52 1 50' thro. truss span..	"	370,000	4 90	19,600	54 00	19,188 40	7,459 73	39
Sturgeon R. Mile 94	1522 04 1 220' thro. truss spans	Can. Br. Co.	734,322	4 67	29,940	50 00	35,789 84	35,789 84	100
Sturgeon R. Mile 119 .	1547 54 3 D.T. skewed thro. truss spans.	"	2,313,234	4 67	98,543	50 00	112,955 18	112,955 18	100
Stamx Lookout River	1554 49 1 88' thro. pl. gr. span & 1- 175' thro. truss span..	"	675,429	4 67	35,470	50 00	33,316 03	33,346 19	100
1st Ning Edith Cr.	1587 29 1 24 1" 0 to 0 dk. pl. gr. span.	Can. Fdy. Co	15,224	5 07	5,700	48 00	1,045 46	1,045 46	100
2nd Ning Edith Cr	1587 69 1 24 1" 0 to 0 dk. pl. gr. span.	"	15,224	5 07	5,700	48 00	1,045 46	1,045 46	100
Wabigoon River.	1626 29 2 40' & 1 93' 0 to 0 dk. pl. gr. 6 spans.	Can. Br. Co	182,832	5 70	27,100	50 00	11,776 42	11,776 42	100
Creek Ning M. 108	1632 29 1 20' 4" 0 to 0 through pl. gr. span ..	Canadian Foundry Co...	20,016	4 90	4,720	48 00	1,207 34	1,207 34	100
Creek Ning M. 118 25	1672 54 1 20' 4" 0 to 0 through pl. gr. span ..	"	20,016	9 90	4,720	48 00	1,207 34	1,207 34	100
Macfarlane River	1684 29 1 100' dk. pl. gr. span..	"	147,384	4 70	16,310	48 00	7,709 93	7,709 93	100
Whumpag River. . .	1689 29 1 100' dk. pl. gr. span	Can. Br. Co	146,450	5 70	58,869	50 00	93,822 21	93,822 21	100
Creek Ning M. 158 75	1713 04 1 20' 4" 0 to 0 through pl. gr. span ..	Can. Fdy. Co	20,016	4 90	4,720	48 00	1,207 34	1,207 34	100
Over Ning C.P.R.	1735 89 2 50' dk. pl. gr & 1-78' through pl. gr. spans..	Can. Br. Co	228,390	5 70	26,636	50 00	14,350 03	14,350 03	100
Whitenouth River	1748 79 2 90' dk. pl. gr. spans..	"	231,474	5 70	27,812	50 00	14,584 62	14,584 62	100
Brokenhead R.E. Br.	1763 69 1 89' 10" 0 to 0 through pl. gr. span ..	"	173,989	5 70	12,603	50 00	10,547 52	10,547 52	100
Brokenhead R.W. Br	1770 29 1 59' 10" 0 to 0 through pl. gr. span ..	"	98,502	5 70	9,250	50 00	6,077 11	6,077 11	100
Over Ning Podlin St. Mile 245 9	1802 15 1 55' D.T. dk. pl. gr. span...	"	176,139	4 40 56'	concrete at \$23,00 per lin.ft. 1539 625 sq. ft. at 8c.	concrete at \$23,00 per lin.ft. 1539 625 sq. ft. at 8c.	9,038 11	9,038 11	100
Over Ning Russell Street ..	1802 35 1 55' D.T. dk. pl. gr. span...	Jackson & Goldie.	141,055	4 40 56'	concrete at \$23,00 per lin.ft. 1539 625 sq. ft. at 8c.	concrete at \$23,00 per lin.ft. 1539 625 sq. ft. at 8c.	7,471 42	7,471 42	100
Over Ning C.P.R. & Bickerton Street...	1802 65 1 100' D.T. pony truss, 4-31' 9", 1-67' D.T. dk. pl. gr. spans and 2 towers 31' 9" span.	Can. Br. Co	918,462	4 60	52,908	52 00	40,549 06	46,549 06	100



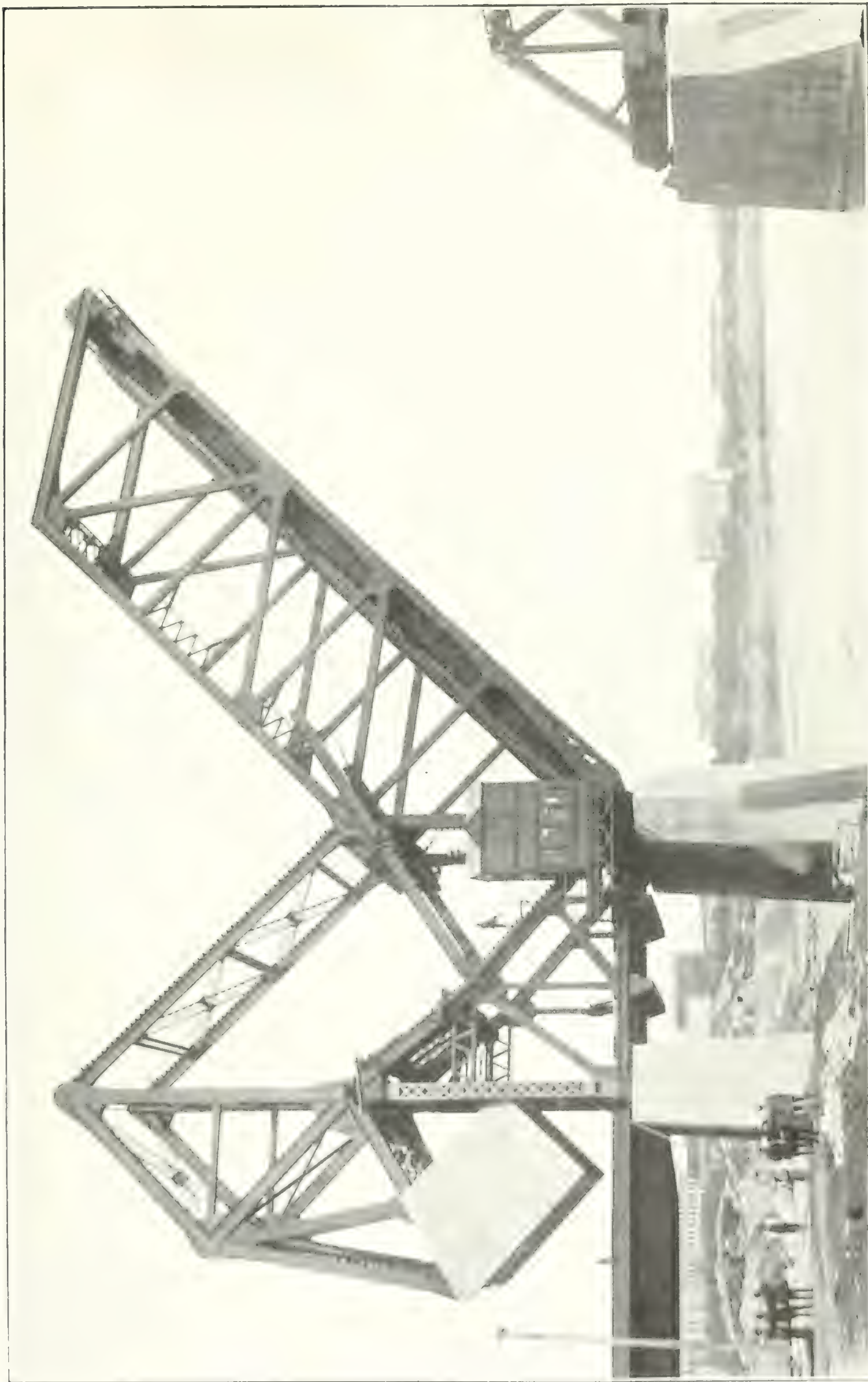
STATEMENT showing approximate cost of Steel Bridges and amounts paid on Contracts to March 31, 1914—Continued.  
DISTRICT "F"—Continued.

Name.	Through Mileage.	Description.	Contractor.	Estimated weight of steel in pounds.	Rate per lb. P. B. M.	Timber P. B. M.	Rate per M ft. P. B. M.	Total estimated cost of super-structure.	Paid to March 31, 1914.	Per-centage of work com-pleted.
					cts.		\$ cts.	\$ cts.	\$ cts.	
Over Xing Archibald Street	1802 75	Waterproofing	C. M. R. Co.			1866 625 sq. ft. at 8c.			149 33	
		1-81' D.T. dk. pl. gr. span	Can. Br. Co.	246,506	4 40	82 5' concrete at \$23.00 per lin. ft.		12,743 76	12,743 76	100
		2-30' D.T. dk. pl. g r. spans.	"	188,876	4 65	21,312 50 00		9,848 33	9,848 33	100
		Waterproofing	C. M. R. Co.			2248 125 sq. ft. at 8c.			179 85	
		Downspouts, &c.	Jackson & Goldie						107 17	
Seine River	1802 95	1-100' 4-50' and 2-30' dk. pl. gr. spans and 2-30' towers.	Can. Br. Co.	819,178	4 55	75,894 52 00		41,219 09	41,219 09	100
Over Xing Highway Mile 246 85	1803 09	1-71' 8" D.T. dk. pl. gr. span.	C. B. & F. Co.	164,173	4 50	15,912 40 00		8,317 22	8,317 22	100
Over Xing C.N.R.	1803 34	Viaduct	"	702,446	4 50	62,424 40 00		34,107 03	34,107 03	100
Over Xing St. Joseph	1803 85	1-71' D.T. dk. pl. gr. span	Can. Br. Co.	192,205	4 40	72 5' concrete at \$23.00 per lin. ft.		10,124 52	10,124 52	100
		Waterproofing	C. M. R. Co.			1,987 sq. ft. at 8c.			158 96	
		Downspouts, &c.	Jackson & Goldie						96 36	
Over Xing Tache Ave.	1803 94	1-71' 4" D.T. dk. pl. gr. span.	Dom. Br. Co.	215,261	4 30	Concrete. \$1,087 50		9,256 22	9,256 22	100
		Waterproofing	C. M. R. Co.			1,987 sq. ft. at 8c.			158 96	
		Downspouts	Jackson & Goldie						84 77	
Red River Bridge	1803 95	4-150' D.T. through truss spans, 1 lift span and viaduct	Dom. Br. Co.	6,272,005	4 30	177,088 35 00		301,013 38	301,013 38	100
		Electrical equipment &c., \$23,383 06		99,401	11 00					
Over Xing C.N.R.		1-55' 4" D.T. through pl. gr. span								
		Waterproofing crossings over Notre Dame Ave., Water street and Mill street	H. W. Sanderson.			9,633 sq. ft. at 7c.			674 31	

OTTAWA, June 22 1914.

R. F. UNIACKE,  
Bridge Engineer.





Transcontinental Railway. — Bascule bridge over the Red river at Winnipeg.









Trans-continental Railway. Bridge over the Ground Hog River, 1,078 miles from Moncton.







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REPORT OF WORK DONE IN THE MECHANICAL DEPARTMENT FROM  
MARCH 31, 1913, TO MARCH 31, 1914.

OTTAWA, ONT., June 10, 1914.

GORDON GRANT, Esq., C.E.,  
Chief Engineer.

SIR,—I have the honour to submit the following report of the work done in the mechanical department of the National Transcontinental railway, for the period extending from 31st March, 1913, to 31st March, 1914.

## TRANSCONA LOCOMOTIVE SHOPS.

The buildings comprising the locomotive shops of the National Transcontinental railway were completed in 1912, with the exception of a few minor details which have been completed this year. The locomotive plant has been used by the Grand Trunk Pacific since 13th January, 1913.

## TRANSCONA CAR SHOPS.

The car department plant was begun in August, 1911. It consists of the freight car shop, east and west coach shop, coach paint shop, planing mill, wheel and machine shop, paint storehouse, car department offices, lumber shed, and dry kiln. The motive power offices were also included in this contract (23-F), Messrs. Haney, Quinlan & Robertson, contractors.

About 95 per cent of the work required to put the car shops on a regularly operating basis has already been completed, and the remaining work, while certainly important, will not consume any very great amount of time.

The east and west coach shops, with transfer table between, are 80 per cent ready for occupation. The hydraulic lifts, or elevators, one in each building, are in working order, and the transfer-table has been built and is in place in the transfer-table pit. It will be ready to operate when electrically connected to the power system.

All electric lights, motors, telephones, and transformers have been purchased and all are practically delivered, and the contractor who has the wiring to do is on the ground and the work is well advanced.

The freight car shop is built and the foundations and floor have been completed. The placing of the machines in the steel car bay is well under way, and the machines will shortly be ready for operation. The industrial tracks are laid in the shops, but are not fully completed in the yard. The rest of this shop is devoted to the repairs of ordinary wooden freight cars, and is ready for occupation.

The lumber shed, the coach paint shop, and the paint storehouse, are completed. The wiring conduits are all in place, and, when wired for lighting, these shops will be ready for occupation. This work is being steadily proceeded with. The car department offices are occupied by the Grand Trunk Pacific. The dry kiln is completed, and can be used at any time. The planing-mill is so far completed that the foundations for the machine tools are in place, and the floors laid. These tools are ordered, and practically all of them are on the ground ready for installation. The wheel and machine shop is completed; the machine tools are installed, and the shop, when electrical connections are made, will be ready for use.

The midway pipe tunnel has been extended the entire length of the midway, and now serves both the locomotive and car department shops. This tunnel contains the supply and exhaust steam pipe system, also that for compressed air, and the electric cables.



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The car department sewer system has been connected with that of the locomotive plant, and this is also true of the fire protection system and the drinking water supply. In this way the whole Transcona plant becomes a unit as far as the general service items are concerned.

The contract for what has been called the "additional buildings" at Transcona, has not yet been awarded. These buildings are, the coach supply house and a heating boiler for this shop, the storm sash stores building, and wheel drop-pit. The matter is still under consideration.

NATIONAL TRANSCONTINENTAL RAILWAY ROUNDHOUSES.

*No. 4, Armstrong, Ont.*—This is a twelve-stall roundhouse, and is now practically finished. The heating system is nearing completion, and the boilers have been delivered and will soon be installed. The turntable is in place, but the tractor has not yet been applied. The air compressor, engine and generator have still to be erected, but they are on the ground. No yard wiring has yet been done, but the material has been purchased, and is on the ground ready for installation. The coaling plant has been installed. The buildings ready for use at this divisional point are: the storehouse, station, freight shed, bunkhouse, icehouse, two section houses, and two toolhouses.

*No. 5, Grant, Ont.*—Here there is a twelve-stall roundhouse with machine shop attached. Ground was broken at this point on July 1, 1913. All the wiring has been arranged for, and the air compressor, electric generator, and engine have been purchased. The boilers have also been purchased, and all will be installed when the foundations are ready. The walls have been erected, but the roof is not on yet. Altogether, approximately 75 per cent of the entire work required at and about this roundhouse, has been completed. The interior work has been started and is being diligently pushed forward. About 95 per cent of the station building is completed. Three-quarters of the water tank work is done. The bunk-house, icehouse, storehouse, section house, tool house, and freight house are very nearly completed.

The transmission line is not yet ready. The roundhouse piping is more than half done; while the yard tracks, water and sewage systems will very shortly be finished.

*No. 6, Hearst, Ont.*—This is a twelve-stall roundhouse without machine shop. The building has been completed and the boilers installed. The pumps are not yet in place, but the piping in the boiler, pump, and engine-room is being put in. The air compressor and electric generator with engine have not been installed yet, and the necessary piping, of course, is not yet in, but all the rest of the piping is in place. The heater-fan, coils, and engine are ready for use. The steel tank is finished. The turntable is in place, but the tractor has not yet been installed. The coaling plant is finished. The yard wiring work has been started. The cinder hoist is not yet ready. The following buildings can be occupied at Hearst, viz., storehouse, bunk-house, two section houses, freight shed, the station, and the icehouse.

*No. 7, Cochrane, Ont.*—At this point there is an 18-stall roundhouse with machine shop attached, all of which is completed.

*No. 8, O'Brien, Que.*—A twelve-stall roundhouse without machine shop, has been built here. The condition of this roundhouse is as follows, viz: the walls, roof, doors, and windows are all erected, but the drop-pit is not yet in. On the whole, about 75 per cent of the work required at this divisional point has been completed. The boilers and air compressor are purchased, and the engine and generator are on the ground. The work on the cinder hoist and water tank is about half done. The station building



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is well advanced and so are the freight house, the bunk-house, icehouse, and storehouse. The tool house work is about half done, and the section house is completed. The yard tracks are almost completed and the water and sewer systems are under way.

*No. 9, Doucet, Que.*—This will be a twelve-stall roundhouse, without machine shop. Tenders were called for but were received too late to have the work completed last summer. Most of the material is now on the ground and instructions have been issued to have the work finished this year.

*No. 10, Parent, Que.*—Here there is a twelve-stall roundhouse with machine shop. The roundhouse has been built, and the engine and electric generator and switchboard have been erected, and the air compressor is now being placed. The water tank is erected, but as yet no permanent connection for water to tank has been made. The boiler and engine-room piping is not yet finished, but the foundations for the boilers and pumps are in. The fan, engine and heater piping are in, and the plumbing is all done. The turntable is in place, but the tractor has yet to come. The machine tool wiring is about to be started and the yard wiring will be begun shortly. The coaling plant contract has been let. There is as yet no yard drainage. The standpipe is not up. The station, bunk-house, storehouse, icehouse, section house, and freight shed are nearly finished. The machine tools are on the ground but have not been installed yet. The roundhouse wiring is practically done and the piping, except for the boiler, engine, and pump-room, is completed. The cinder hoist is up.

*No. 11, Fitzpatrick, Que.*—At this station there is a twelve-stall roundhouse without machine shop. The buildings and the heating plant are complete. The boiler foundations are ready for the boilers, which are on the ground though not yet in. The roundhouse wiring is practically complete. The fan is in place but the plaster partition between engine and boiler-room is yet to be built. The engine, generator, and air compressor are on the ground waiting for foundations. The piping is about finished, except in the pump, boiler, and engine-room. The turntable, water tank, and cinder-pits are all completed. The yard water system is not yet finished, and so far no drainage has been provided. The coaling plant contract has been let. The cinder hoist is not finished. The special station at La Tuque is also finished, but not wired. The (design "D") station, bunk-house, icehouse, storehouse, section house and tool house have been completed. The water system and the sewer system have not yet been completed.

*No. 12, Bridge, Que.*—At this point, which is near Quebec city, there is an eighteen-stall roundhouse without machine shop. The building, with the exception of the engine room for the housing of the compressor and generating apparatus, has been built, and the contract for this addition to the building has been awarded to Mr. Jos. Gosselin, of Point Lévis, Que. The 50-k.w. generating unit has been delivered and is ready for installation when the engine room is built. The air compressor is also on the ground. The boilers and the boiler piping have not yet been begun. The boilers are on the ground. The coaling plant has not been erected but the contract has been let. The heating system is complete and the turntable is in but the tractor has not been applied. The icehouse, bunk-house, storehouse, section house, tool house, freight house, and station are finished. The yard water system is finished but the deep well and equipment has not yet been begun. The cinder hoist has not yet been put in. The roundhouse wiring is three-quarters done. The yard tracks are about half done and the sewage system almost completed.

*No. 13, Monk, Que.*—Here there is a twelve-stall roundhouse without machine shop. The roundhouse is practically finished. The heater fan coils and engine are in place but not piped up yet. The plumbing work is under way, and will be completed in the near future. The engine, generator, air compressor, and receiver, are



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on the ground but have not yet been erected. This is also true of the boilers. The roundhouse wiring is almost completed and the roundhouse piping is three-quarters done. About 40 per cent of the yard track work is done, and the water and sewer systems are well under way. The yard filling is not yet completed. The turntable is in, and the tractor has been received but is not yet in place. The pumps have not been installed. The cinder hoist is not erected, but this work will be reached as soon as possible. The indoor work is being pushed ahead vigorously. The contract for the coaling plant is let. The icehouse is ready for use, and the station, bunk-house, section house, tool house, and freight shed are all finished, and the storehouse is practically finished. The foundations for the equipment are now in. The pit-jack for the drop-pit is on hand, but has not yet been placed. The boilers are being installed.

*No. 14, Edmundston, N.B.*—Here there is a twelve-stall roundhouse with machine shop attached. This roundhouse has been in service for over a year. The piping to the generator engine and air compressor has been completed. The cinder hoist has been installed, and so has the coaling plant, which has been tested. The turntable is in place, and the tractor has been installed and piped. The machine tools have been erected and wired, and are ready for operation. The transmission line has been completed. The roundhouse lighting has been completed. The yard, water and drainage systems have been completed. The freight shed, storehouse, icehouse, bunk-house, and the station buildings have been completed.

*No. 15, Napadogan, N.B.*—At this point there is a twelve-stall roundhouse with machine shop. The boilers have been used for about a year. The air compressor and receiver are erected, also the electric generator with engine, and the switchboard. The engine-room piping is well under way. The floors in the machine shop are finished. The machine tools in the machine shop are erected, and the wiring is almost completed. The icehouse is ready for use.

The yard poles carrying the transmission line and connections are completed. The air tractor and turntable are installed and the tractor is piped up. The piping to the generator and air compressor has yet to be put in. The coaling plant has been completed and tested. The water tank is in place. The sewer system has been completed. The cinder hoist is complete. The roundhouse lighting system is complete. The track scales are in. The station and bunk-house are completed, and so is the freight house.

*No. 16, Moncton, N.B.*—There is a twelve-stall roundhouse here, with machine shop. The building is up and the machine tools, except power hammers, are all installed and the wiring is completed. The boilers are in and partially piped. The pump is in place and piping very nearly finished. The jib-crane is set up in place. The air compressor is installed and the piping finished. Pipe covering, except for boiler and engine-room, has been completed. The flooring in the machine shop is completed. The engine, generator, and switchboard are completed. The roundhouse lighting is completed and the coaling plant is erected. The ash pits are in place and the cinder hoist is erected and air connection to it will soon be made. The transmission line is completed. The yard water system is partially completed, but without town supply connection, as yet. The drainage system for the yard is completed, and the standpipe has been set up. The turntable is in working order and the tractor set up. The icehouse is built, and so is the storehouse. The track scales are in and the yard tracks are almost completed.

In conclusion I may say that I anticipate that the work on all the roundhouses will be completed, and that they will be ready for operating this year.



## SESSIONAL PAPER No. 37

## THE LEONARD LOCOMOTIVE AND CAR SHOPS AT ST. MALO, QUEBEC.

On October 8, 1913, the contract for the Leonard locomotive and car shops of the National Transcontinental railway was let to Mr. Joseph Gosselin, of Point Lévis, Que. By the close of 1913, the work was fully in progress.

The foundations for the locomotive, boiler, and tank shops have been completed. The foundations for the forge shop are also finished. About 70 per cent of the store-house foundations have been built. About 80 per cent of the oilhouse, and about 90 per cent of the foundations for the power-house have been finished. About 70 per cent of the excavation for the reservoir foundation has been done.

The work of excavating for the other buildings has been so far pushed ahead that about 65 per cent of the excavation for the sewer system had been done. The foundation for the office building is all in. About 85 per cent of the excavation for the freight car shop has been done, and the lumber shed foundations are finished. The planing mill excavation is about 40 per cent done. The water piping system has been begun and might approximately be represented by about 3 per cent.

Considering all the circumstances, one may fairly say that the work has progressed, and is progressing, in a most satisfactory manner.

Yours truly,

W. J. PRESS,

*Mechanical Engineer.*

## STATEMENT OF EXPENDITURE for the Fiscal Year ended March 31, 1914.

## CHEQUES ISSUED.

Year.	Contracts.	Accounts Payable.	Pay Rolls.
	\$      cts.	\$      cts.	\$      cts.
1913			
April.....		149,084 79	18,290 99
May.....	277,264 62	409,268 17	60,284 94
June.....	703,630 64	455,459 18	65,030 70
July.....	1,090,787 62	96,917 98	64,471 03
August.....	926,919 19	614,684 16	64,494 57
September.....	991,411 65	262,228 78	65,173 33
October....	1,164,631 59	288,753 57	64,531 48
November....	865,933 76	237,283 10	58,886 10
December .....	856,883 61	460,597 09	55,816 52
1914			
January....	490,872 15	374,099 63	46,084 96
February .....	211,847 05	347,643 11	42,222 78
March .....	244,984 46	243,574 10	45,506 22
April ....	258,412 79	125,781 07	25,973 25
	8,083,579 13	4,065,374 73	676,766 87

## SUMMARY.

Cheques issued for Contracts .....	\$8,083,579 13
"      "      " Account payable.....	4,065,374 73
"      "      " Pay rolls.....	676,766 87
	12,825,720 73
Less amount deposited to the credit of the Receiver General .....	141,057 57
Total expenditures.....	12,684,663 16

E. L. PARENT,

*Acting Accountant.*



STATEMENT OF EXPENDITURE for the Fiscal Year ended March 31, 1914.

SUMMARY.

Headquarters.. . . . .	\$	172,068	60	
District "A"—Construction.. . . . .	\$	126,811	66	
" "B"—" .. . . . .		5,826,176	82	
" "C"—" .. . . . .		1,256,250	91	
" "D"—" .. . . . .		1,187,121	18	
" "E"—" .. . . . .		2,580,654	84	
" "F"—" .. . . . .		1,229,714	73	
				\$ 12,506,730 14
District "B"—Transport.. . . . .	\$	2,102	75	
" "C"—" .. . . . .		1,030	21	
" "D"—" .. . . . .		454	00	/
" "E"—" .. . . . .		2,277	46	
				5,864 42
				\$ 12,684,663 16

E. L. PARENT,  
*Acting Accountant.*

STATEMENT OF EXPENDITURE for the Fiscal Year ended March 31, 1914.

HEADQUARTERS.

	Dr.	Cr.
Accounting Department.. . . . .	\$ 19,312 98	
Purchasing Department.. . . . .	17,879 65	
Commissioners' Department.. . . . .	11,500 00	
Engineering Department.. . . . .	59,655 18	
Interim Account.. . . . .		\$ 7,000 00
Supplies.. . . . .	2,973 23	
Furniture and fixtures.. . . . .		162 44
Freight and express.. . . . .	567 09	
Telegraph and telephone.. . . . .	2,254 44	
Rent and taxes.. . . . .	13,452 61	
Insurance.. . . . .	462 22	
Travelling expenses.. . . . .	6,413 37	
Advances.. . . . .	1,800 00	
Right of way and station grounds.. . . . .	6,827 82	
General expenses.. . . . .	30,730 20	
Per diem charges.. . . . .		1,948 28
Legal expenses.. . . . .	6,164 18	
Stock.. . . . .		3,154 27
Car "Empire".. . . . .	2,267 02	
Car "Transcona".. . . . .	2,073 60	
	\$ 184,333 59	\$ 12,264 99
Less Credits.. . . . .	12,264 99	
Total.. . . . .	\$ 172,068 60	

E. L. PARENT,  
*Acting Accountant.*



## SESSIONAL PAPER No. 37

## STATEMENT OF EXPENDITURE for the Fiscal Year ended March 31, 1914.

## DISTRICT "A."

	Dr.	Cr.
Supplies.. . . . .	.....	\$ 133 49
Camp outfit.. . . . .	\$ 18 95	
General expenses.. . . . .	4,626 90	
Freight and express.. . . . .	278 23	
Engineering.. . . . .	13,822 93	
Instruments.. . . . .	.....	561 00
Insurance.. . . . .	3,259 68	
Grading.. . . . .	1,414 78	
Clearing.. . . . .	378 48	
Grubbing.. . . . .	1,637 00	
Overhaul.. . . . .	15,421 81	
Ties.. . . . .	5,280 34	
Track laying and surfacing.. . . . .	3,284 99	
Fencing right of way.. . . . .	1,093 92	
Crossings, cattle-guards and signs.. . . . .	.....	522 73
Telegraph lines.. . . . .	1,228 07	
Interlocking and signals.. . . . .	146 29	
Ballast and ballasting.. . . . .	20,607 18	
Water stations.. . . . .	12,646 56	
Rails.. . . . .	.....	36,342 97
Track fastenings.. . . . .	.....	2,494 45
Frogs and switches.. . . . .	.....	1,697 82
Right of way and station grounds.. . . . .	20,359 91	
Station buildings and fixtures.. . . . .	19,294 87	
Miscellaneous structures.. . . . .	509 05	
Shops, roundhouses and turntables.. . . . .	99,311 89	
Shop machinery and tools.. . . . .	66,619 01	
Fuel stations.. . . . .	12,385 36	
Yards and terminals.. . . . .	3,878 13	
Bridges, trestles and culverts.. . . . .	7,403 62	
Rent.. . . . .	.....	203 19
Time cheques.. . . . .	221 20	
Contract reserve.. . . . .	153,663 16	
Furniture.. . . . .	.....	25 00
	<hr/>	<hr/>
	\$ 468,792 31	\$ 41,980 65
Less Credits.. . . . .	41,980 65	
Total.. . . . .	<hr/> \$ 426,811 66	

E. L. PARENT,

*Acting Accountant.*



STATEMENT OF EXPENDITURE for the Fiscal Year ended March 31, 1914.

DISTRICT "B."		Dr.	Cr.
Supplies.. . . . .		15,873 66	
Camp outfit . . . . .		1,024 05	
General expenses.. . . . .		37,518 50	
Freight and express.. . . . .		6,207 94	
Medical services.. . . . .		26 87	
Engineering.. . . . .		162,277 55	
Instruments.. . . . .		.....	557 50
Insurance.. . . . .		1,500 15	
Transport.. . . . .		2,102 75	
Grading.. . . . .		1,551,288 25	
Clearing.. . . . .		20,557 76	
Grubbing.. . . . .		17,525 34	
Overhaul.. . . . .		46,251 21	
Ties.. . . . .		57,630 84	
Track laying and surfacing.. . . . .		57,814 81	
Fencing right of way.. . . . .		26,826 18	
Crossings, cattle-guards and signs.. . . . .		10,701 79	
Tunnels.. . . . .		2,270 65	
Telegraph lines.. . . . .		21,037 88	
Interlocking and signals.. . . . .		12,310 40	
Ballast and ballasting.. . . . .		250,609 55	
Water stations.. . . . .		145,403 42	
Rails... . . . .		319,230 70	
Track fastenings.. . . . .		33,608 38	
Frogs and switches.. . . . .		16,708 97	
Right of way and station grounds.. . . . .		104,054 26	
Station buildings and fixtures.. . . . .		214,879 15	
Miscellaneous structures.. . . . .		19,550 15	
Shops, roundhouses and turntables.. . . . .		120,686 90	
Shop machinery and tools.. . . . .		54,240 92	
Fuel stations.. . . . .		1,834 60	
Yards and terminals.. . . . .		757,079 84	
Joint terminals in Quebec.. . . . .		201,422 45	
Floating equipment.. . . . .		455,841 11	
Docks and wharves.. . . . .		240,481 71	
Bridges, trestles and culverts.. . . . .		213,903 56	
Rent.. . . . .		.....	2,662 12
Operation.. . . . .		34,000 00	
Time cheques.. . . . .		60 30	
Contract reserve.. . . . .		127,034 19	
Furniture.. . . . .		24 80	
Leonard shops.. . . . .		470,097 65	
		<hr/>	
		\$5,831,499 19	\$ 3,219 62
Less Credits.. . . . .		3,219 62	
		<hr/>	
Total.. . . . .		\$5,828,279 57	

E. L. PARENT,  
Acting Accountant.



## SESSIONAL PAPER No. 37

## STATEMENT OF EXPENDITURE for the Fiscal Year ended March 31, 1914.

DISTRICT "C"		Dr.	Cr.
Supplies.. . . . .	\$	16,428 85	
Camp outfit.. . . . .		769 27	
General expenses.. . . . .		9,871 11	
Freight and express.. . . . .		2,814 12	
Medical service.. . . . .		2 75	
Engineering.. . . . .		56,834 35	
Instruments.. . . . .		.....	141 85
Insurance.. . . . .		463 54	
Transport.. . . . .		1,030 21	
Frogs and switches.. . . . .		3,299 73	
Grading.. . . . .		355,181 14	
Clearing.. . . . .		13,696 80	
Grubbing.. . . . .		10,393 91	
Overhaul.. . . . .		49,331 59	
Ties.. . . . .		23,360 90	
Track laying and surfacing.. . . . .		25,884 10	
Telegraph lines.. . . . .		16,441 80	
Ballast and ballasting.. . . . .		60,431 83	
Water stations.. . . . .		19,408 53	
Rails.. . . . .		1,274 51	
Track fastenings.. . . . .		7,207 37	
Miscellaneous structures.. . . . .		18,988 18	
Station buildings and fixtures.. . . . .		79,988 24	
Shops, roundhouses and turntables.. . . . .		57,004 09	
Shop machinery and tools.. . . . .		485 20	
Fuel stations.. . . . .		1,987 63	
Yards and terminals.. . . . .		38 25	
Bridges, trestles and culverts.. . . . .		445,652 27	
Time cheques.. . . . .		201 15	
Contract reserve.. . . . .		.....	21,048 45
		\$1,278,471 42	\$ 21,190 30
Less Credits.. . . . .		21,190 30	
Total.. . . . .		\$1,257,281 12	

E. L. PARENT,

*Acting Accountant.*



STATEMENT OF EXPENDITURE for the Fiscal Year ended March 31, 1914.

DISTRICT "D."		Dr.	Cr.
Supplies.. .. .	\$	10,361 41	
Camp outfit.. .. .		222 12	
General expenses.. .. .		11,548 32	
Freight and express.. .. .		3,363 22	
Medical service.. .. .		10 50	
Engineering.. .. .		59,976 78	
Instruments.. .. .		.....	\$ 151 40
Insurance.. .. .		2,548 32	
Transport.. .. .		454 00	
Grading.. .. .		367,142 79	
Clearing.. .. .		14,723 12	
Grubbing.. .. .		.....	2,021 38
Overhaul.. .. .		32,741 95	
Ties.. .. .		.....	18,158 02
Track laying and surfacing.. .. .		11,855 62	
Crossings, cattle-guards and signs.. .. .		810 75	
Telegraph lines.. .. .		13,392 75	
Interlocking and signals.. .. .		169 97	
Ballast and ballasting.. .. .		77,328 53	
Water stations.. .. .		.....	11,005 23
Rails.. .. .		32,378 12	
Track fastenings.. .. .		2,817 36	
Frogs and switches.. .. .		992 91	
Right of way and station grounds.. .. .		329 05	
Station buildings and fixtures.. .. .		78,127 81	
Miscellaneous structures.. .. .		5,873 65	
Shops, roundhouses and turntables.. .. .		13,849 75	
Shop machinery and tools.. .. .		26,795 16	
Fuel stations.. .. .		2,072 45	
Yards and terminals.. .. .		57,825 88	
Bridges, trestles and culverts.. .. .		116,552 85	
Rent.. .. .		.....	324 77
Operation.. .. .		71,049 11	
Time cheques.. .. .		41 85	
Contract reserve.. .. .		203,879 88	
		<hr/>	
		\$1,219,235 98	\$ 31,660 80
Less Credits.. .. .		31,660 80	
		<hr/>	
Total.. .. .		\$1,187,575 18	

E. L. PARENT,  
Acting Accountant.



## SESSIONAL PAPER No. 37

## STATEMENT OF EXPENDITURE for the Fiscal Year ended March 31, 1914.

DISTRICT "E."		Dr.	Cr.
Supplies.. . . . .	\$	19,466 71	
Camp outfit.. . . . .		240 14	
General expenses.. . . . .		13,603 78	
Freight and express.. . . . .		1,221 32	
Engineering.. . . . .		63,661 88	
Insurance.. . . . .		1,003 58	
Transport.. . . . .		2,277 46	
Grading.. . . . .	1,086,872 67		
Clearing.. . . . .	10,408 31		
Grubbing.. . . . .	6,572 65		
Overhaul.. . . . .	11,166 24		
Ties.. . . . .	20,938 35		
Track laying and surfacing.. . . . .	6,797 85		
Tunnels.. . . . .	114 00		
Telegraph lines.. . . . .	11,515 34		
Ballast and ballasting.. . . . .	173,109 78		
Water stations.. . . . .	67,041 61		
Rails.. . . . .	1,755 32		
Track fastenings.. . . . .	32 21		
Frogs and switches.. . . . .	18 02		
Right of way and station grounds.. . . . .	25 00		
Station buildings and fixtures.. . . . .	153,034 27		
Miscellaneous structures.. . . . .	21,264 50		
Shops, roundhouses and turntables.. . . . .	119,112 52		
Shop machinery and tools.. . . . .	20,680 54		
Fuel stations.. . . . .	24,123 02		
Yards and terminals.. . . . .	2,181 49		
Bridges, trestles and culverts.. . . . .	798,997 22		
Rent.. . . . .			\$ 94 35
Time cheques.. . . . .			13 66
Contract reserve.. . . . .			54,205 12
Furniture.. . . . .	9 65		
	\$2,637,245 43		\$ 54,313 13
Less Credits.. . . . .	54,313 13		
Total.. . . . .	\$2,582,932 30		

E. L. PARENT,  
Acting Accountant.



5 GEORGE V. A. 1915

## STATEMENT OF EXPENDITURE for the fiscal year ended March 31, 1914.

DISTRICT "F."		Dr.	Cr.
Legal expenses.. . . . .	\$	5 85	
Supplies.. . . . .		6,263 62	
Camp outfit.. . . . .		.....	\$ 149 20
General expenses.. . . . .		12,414 29	
Freight and express.. . . . .		1,238 58	
Medical service.. . . . .		20 00	
Engineering.. . . . .		52,936 64	
Instruments.. . . . .		.....	97 00
Insurance.. . . . .		7,861 53	
Grading.. . . . .		111,927 47	
Clearing.. . . . .		1,814 36	
Grubbing.. . . . .		1,514 91	
Overhaul.. . . . .		4,534 64	
Ties.. . . . .		.....	5,923 14
Track laying and surfacing.. . . . .		3,072 30	
Crossings, cattle-guards and signs.. . . . .		.....	140 00
Telegraph lines.. . . . .		17,777 74	
Interlocking and signals.. . . . .		6,700 00	
Ballast and ballasting.. . . . .		27,521 00	
Water stations.. . . . .		22,888 23	
Rails.. . . . .		.....	1,140 66
Track fastenings.. . . . .		831 06	
Frogs and switches.. . . . .		875 56	
Right of way and station grounds.. . . . .		49,614 07	
Station buildings and fixtures.. . . . .		20,376 77	
Miscellaneous structures.. . . . .		2,574 54	
Shops, roundhouses and turntables.. . . . .		322,174 80	
Shop machinery and tools.. . . . .		283,928 90	
Fuel stations.. . . . .		11,269 43	
Yards and terminals.. . . . .		.....	239,033 86
Bridges, trestles and culverts.. . . . .		33,086 49	
Operation.. . . . .		672 86	
Time cheques.. . . . .		.....	341 75
Contract reserve.. . . . .		153,554 20	
Furniture.. . . . .		.....	15 00
Rent, Winnipeg terminals.. . . . .		192,500 00	
Interest, Winnipeg terminals.. . . . .		126,605 80	
		<u>\$1,476,555 64</u>	<u>\$ 246,840 91</u>
Less Credits.. . . . .		246,840 91	

Acting Accountant.

E. L. PARENT,



## SESSIONAL PAPER No. 37

## STATEMENT OF LIABILITIES on March 31, 1914.

Ten per cent reserved on contracts:—

District "A" .. .. .	\$ 14,830 81
" "B" .. .. .	476,769 94
" "C" .. .. .	223,214 16
" "D" .. .. .	89,462 23
" "E" .. .. .	340,798 69
" "F" .. .. .	210,395 49

\$1,355,471 32

Outstanding time cheques.. .. . 1,140 55

Interim account.. .. . 7,000 00

Contingent liabilities—

Unclaimed cheques deposited to the credit of the Receiver

General.. .. . 1,359 75

\$1,364,971 62

E. L. PARENT,  
Acting Accountant.

## STATEMENT OF EXPENDITURE from September, 1904, to March 31, 1914.

## CHEQUES ISSUED.

Year.	Contracts.	Accounts Payable.	Pay Rolls
	\$ cts.	\$ cts.	\$ cts.
Year 1904-05. ....		385,445 79	428,225 66
" 1905-06. ....	51,239 08	714,771 65	761,942 45
" 1906-07. ....	3,993,640 06	954,692 38	646,924 55
" 1907-08. ....	15,637,591 05	2,346,786 77	1,002,535 82
" 1908-09. ....	21,129,957 36	2,627,644 48	1,215,423 52
" 1909-10. ....	16,694,267 68	2,174,880 67	1,202,445 12
" 1910-11. ....	18,678,176 31	3,700,007 96	1,187,151 09
" 1911-12. ....	15,115,638 77	5,031,187 29	1,059,630 64
" 1912-13. ....	10,679,342 09	2,210,270 41	924,777 13
" 1913-14. ....	8,083,579 13	4,065,374 73	676,766 87
	110,063,431 53	24,211,062 13	9,105,822 85

## SUMMARY.

Cheques issued for Contracts. ....	\$110,063,431 53
" " " Accounts payable .. .. .	24,211,062 13
" " " Pay rolls.....	9,105,822 85

\$143,380,316 51

Less amount deposited to the credit of the Receiver General .. .. . 800,692 13

\$142,579,624 38

Special item paid by the Finance Department, in 1905, for surveys made  
by the Grand Trunk Pacific Railway, east of Winnipeg. .... 352,191 73

\$142,931,816 11

Cost of operation, district "A", for the year 1912-13. .... 36,182 91

Total expenditure . . . . . \$142,967,999 02

E. L. PARENT,  
Acting Accountant.



STATEMENT OF EXPENDITURE from September, 1904, to March 31, 1914—(Con.

From September, 1904. to June 30, 1905.. . . .	\$	778,363	63
For the year ended June 30, 1906 (including amount paid by the Finance Department to the Grand Trunk Pacific Railway Co., for the surveys, east of Winnipeg, taken over by the Commissioners, viz.:—\$352,191.73).. . . .		1,831,263	50
For the nine months ended March 31, 1907.. . . .		5,537,867	50
For the year ended March 31, 1908.. . . .		18,910,449	41
" " " 1909.. . . .		24,892,772	98
" " " 1910.. . . .		19,968,126	86
" " " 1911.. . . .		23,487,853	73
" " " 1912.. . . .		21,110,993	90
" " " 1913.. . . .		13,729,461	44
" " " 1914.. . . .		12,684,663	16
		\$142,931,816	11
Cost of operation, District "A," for the year 1912-13.. . . .		36,182	91
Total expenditure.. . . .		\$142,967,999	02

E. L. PARENT,  
*Acting Accountant.*

STATEMENT OF EXPENDITURE from September, 1904, to March 31, 1914—(Con.

Headquarters.. . . .	\$	1,816,947	19
Location—District "A".. . . .	\$	304,367	85
" " "B".. . . .		569,488	50
" " "C".. . . .		529,261	81
" " "D".. . . .		446,018	32
" " "E".. . . .		257,543	94
" " "F".. . . .		836,648	43
		\$	2,943,328 85
Construction—District "A".. . . .	\$	17,818,311	19
" " "B".. . . .		47,705,086	78
" " "C".. . . .		6,267,026	17
" " "D".. . . .		16,336,027	56
" " "E".. . . .		9,922,000	45
" " "F".. . . .		39,092,186	51
		\$137,140,638	66
Transport—District "B".. . . .	\$	52,698	10
" " "C".. . . .		330,642	92
" " "D".. . . .		294,163	01
" " "E".. . . .		213,935	89
" " "F".. . . .		99,461	49
		1,030,901	41
		\$142,931,816	11
Cost of operation. District "A," for the year 1912-13.. . . .		36,182	91
		\$142,967,999	02

E. L. PARENT,  
*Acting Accountant.*



## SESSIONAL PAPER No. 37

STATEMENT OF EXPENDITURE from September, 1904, to March 31, 1914—*Con.*

HEADQUARTERS.		Dr.	Cr.
Commissioners' Department.. . . . .	\$	216,605 62	
Accounting Department.. . . . .		166,537 06	
Engineering Department.. . . . .		504,378 79	
Purchasing Department.. . . . .		109,052 00	
Stock.. . . . .		.....	\$ 9,351 60
Car "Empire".. . . . .		38,139 30	
Car "Transcona".. . . . .		22,939 58	
Supplies and stationery.. . . . .		49,370 65	
Furniture.. . . . .		24,891 15	
Freight and express.. . . . .		14,539 93	
Telegraph and telephone.. . . . .		26,684 99	
Rent and taxes.. . . . .		106,042 60	
Insurance.. . . . .		17,736 35	
Travelling expenses.. . . . .		51,670 80	
Advances.. . . . .		2,000 00	
General expenses.. . . . .		405,362 42	
Right of way and station grounds.. . . . .		13,814 38	
Outstanding wages and accounts payable.. . . . .		.....	196 48
Legal expenses.. . . . .		50,634 11	
Transport.. . . . .		6,482 15	
Medical service.. . . . .		6,613 39	
Interim account.. . . . .		.....	7,000 00
		<hr/>	<hr/>
		\$1,833,495 27	\$ 16,548 08
Less Credits.. . . . .		16,548 08	
		<hr/>	
		\$1,816,947 19	

E. L. PARENT,

*Acting Accountant.*



5 GEORGE V., A. 1915

STATEMENT OF EXPENDITURE from September, 1904, to March 31, 1914—*Con.*

DISTRICT "A."		Dr.	Cr.
Legal expenses.. . . . .	\$	2,421 84	
Supplies.. . . . .		122,816 07	
Camp outfit.. . . . .		10,517 59	
General expenses.. . . . .		215,431 06	
Freight and express.. . . . .		11,814 46	
Medical service.. . . . .		804 03	
Engineering.. . . . .		1,007,622 97	
Insurance.. . . . .		5,824 38	
Grading.. . . . .		7,585,612 26	
Clearing.. . . . .		158,641 83	
Grubbing.. . . . .		100,186 90	
Overhaul.. . . . .		659,809 84	
Ties.. . . . .		477,434 93	
Track laying and surfacing.. . . . .		165,746 26	
Fencing right of way.. . . . .		130,331 78	
Crossings, cattle-guards and signs.. . . . .		24,566 62	
Tunnels.. . . . .		51,150 71	
Telegraph lines.. . . . .		74,711 73	
Interlocking and signals.. . . . .		21,272 25	
Ballast and ballasting.. . . . .		530,747 36	
Water stations.. . . . .		167,319 79	
Rails.. . . . .		1,492,801 17	
Track fastenings.. . . . .		226,890 23	
Frogs and switches.. . . . .		37,430 29	
Right of way and station grounds.. . . . .		541,712 86	
Station buildings and fixtures.. . . . .		181,284 19	
Miscellaneous structures.. . . . .		33,679 97	
Shops, roundhouses and turntables.. . . . .		278,284 55	
Shop machinery and tools.. . . . .		90,172 82	
Fuel stations.. . . . .		61,057 44	
Yards and terminals.. . . . .		92,765 34	
Bridges, trestles and culverts.. . . . .		3,573,391 79	
Rent.. . . . .			\$ 203 19
Contract reserve.. . . . .			14,830 81
Furniture.. . . . .		3,457 73	
		<hr/>	
		\$18,137,713 04	\$ 15,034 00
Less Credits.. . . . .		15,034 00	
		<hr/>	
		\$18,122,679 04	
Cost of operation for the year 1912-13.. . . . .		36,182 91	
		<hr/>	
		\$18,158,861 95	

E. L. PARENT,  
Acting Accountant.





Transcontinental Railway. Freight car shop, Transcona, Man.



Transcontinental Railway. Freight car shop at Transcona, Man.







## SESSIONAL PAPER No. 37

## STATEMENT OF EXPENDITURE from September, 1901, to March 31, 1914—Continued

## DISTRICT "B."

	Dr.	Cr.
Legal expenses.. . . .		
Supplies.. . . .		
Camp outfit.. . . .		
General expenses.. . . .		
Freight and express.. . . .		
Medical service.. . . .		
Engineering.. . . .		
Insurance.. . . .		
Transportation.. . . .		
Grading.. . . .		
Clearing.. . . .		
Grubbing.. . . .		
Overhaul.. . . .		
Ties.. . . .		
Track laying and surfacing.. . . .		
Fencing right of way.. . . .		
Crossings.. . . .		
Tunnels.. . . .		
Telegraph lines.. . . .		
Interlocking and signals.. . . .		
Ballast and ballasting.. . . .		
Water stations.. . . .		
Rails.. . . .		
Track fastenings.. . . .	562,120	
Frogs and switches.. . . .		
Right of way and land.. . . .	1,150,362	
Station buildings and fixtures.. . . .	110,679	79
Miscellaneous structures.. . . .	68,642	
Shops, roundhouses and turntables.. . . .	102,931	75
Shop machinery and tools.. . . .	93,963	
Fuel stations.. . . .	1,834	60
Yards and terminals.. . . .	1,733,319	1
Joint terminals in Quebec.. . . .	207,518	46
Floating equipment.. . . .	10,111	00
Docks and wharves.. . . .	245,573	72
Bridges, trestles and culverts.. . . .	7,623,601	97
Rent.. . . .		\$ 2,662 12
Operation.. . . .	34,000	00
Time cheques.. . . .		100 45
Contract reserve.. . . .		479,532 51
Furniture.. . . .	13,771	75
Leonard shops.. . . .	470,097	65
	\$ 48,846,805 40	\$ 479,532 51
Less Credits.. . . .	479,532 51	
	\$ 48,367,273	

F. L. PARENT,

Auditor General.



STATEMENT OF EXPENDITURE from September, 1904, to March 31, 1914—Continued.

DISTRICT "C."		Dr.	Cr.
Legal expenses.. . . .	\$	291 73	
Supplies.. . . .		137,102 46	
Camp outfit.. . . .		30,718 92	
General expenses.. . . .		52,951 01	
Freight and express.. . . .		16,231 52	
Medical service.. . . .		3,351 71	
Engineering.. . . .		880,201 32	
Insurance.. . . .		463 54	
Transport.. . . .		330,642 92	
Grading.. . . .		2,594,269 52	
Clearing.. . . .		172,885 30	
Grubbing.. . . .		104,039 56	
Overhaul.. . . .		132,643 08	
Ties.. . . .		253,883 80	
Track laying and surfacing.. . . .		106,086 65	
Telegraph lines.. . . .		37,029 15	
Ballast and ballasting.. . . .		138,905 11	
Water stations.. . . .		36,397 55	
Rails.. . . .		437,702 26	
Track fastenings.. . . .		57,269 37	
Frogs and switches.. . . .		6,413 02	
Station buildings and fixtures.. . . .		79,988 24	
Miscellaneous structures.. . . .		22,717 84	
Shops, roundhouses and turntables.. . . .		57,004 09	
Shop machinery and tools.. . . .		1,061 58	
Fuel stations.. . . .		1,987 63	
Yards and terminals.. . . .		1,090 39	
Bridges, trestles and culverts.. . . .		1,655,644 72	
Time cheques.. . . .		.....	\$ 79 57
Contract reserve.. . . .		.....	223,214 16
Furniture.. . . .		1,250 63	
		\$7,350,224 63	\$ 223,293 73
Less Credits.. . . .		223,293 73	
		\$7,126,930 90	

E. L. PARENT,  
Acting Accountant.



## SESSIONAL PAPER No. 37

## STATEMENT OF EXPENDITURE from September, 1904, to March 31, 1914—Continued.

DISTRICT "D."		Dr.	Cr.
Legal expenses.. . . . .	\$	87 50	
Supplies.. . . . .		181,880 21	
Camp outfit.. . . . .		40,322 24	
General expenses.. . . . .		181,292 16	
Freight and express.. . . . .		24,319 34	
Medical service.. . . . .		6,405 74	
Engineering.. . . . .		1,102,446 25	
Insurance.. . . . .		4,495 72	
Transport.. . . . .		294,163 01	
Grading.. . . . .		6,521,078 15	
Clearing.. . . . .		320,712 09	
Grubbing.. . . . .		238,312 05	
Overhaul.. . . . .		310,452 73	
Ties.. . . . .		628,777 96	
Track laying and surfacing.. . . . .		177,963 85	
Crossings, cattle-guards and signs.. . . . .		1,460 75	
Tunnels.. . . . .		4,985 13	
Telegraph lines.. . . . .		67,142 54	
Interlocking and signals.. . . . .		2,969 97	
Ballast and ballasting.. . . . .		498,020 17	
Water stations.. . . . .		86,551 11	
Rails.. . . . .		2,121,162 60	
Track fastenings.. . . . .		329,035 75	
Frogs and switches.. . . . .		46,304 16	
Right of way and station grounds.. . . . .		4,783 38	
Station buildings and fixtures.. . . . .		222,660 52	
Miscellaneous structures.. . . . .		43,528 17	
Shops, roundhouses and turntables.. . . . .		205,499 63	
Shop machinery and tools.. . . . .		49,541 70	
Fuel stations.. . . . .		54,411 43	
Yards and terminals.. . . . .		67,168 20	
Bridges, trestles and culverts.. . . . .		3,234,840 46	
Rent.. . . . .			324 77
Operation.. . . . .		90,327 87	
Time cheques.. . . . .			127 67
Contract reserve.. . . . .			89,462 23
Furniture.. . . . .		3,021 02	
	\$	17,166,123 56	\$ 89,914 67
Less Credits.. . . . .		89,914 67	
	\$	17,076,208 89	

E. L. PARENT,  
Acting Accountant.



STATEMENT OF EXPENDITURE from September, 1904. to March 31, 1914—Continued.

DISTRICT "E."		Dr.	Cr.
Supplies.. . . . .	\$	91,924 00	
Camp outfit.. . . . .		14,092 12	
General expenses.. . . . .		66,964 64	
Freight and express.. . . . .		14,908 99	
Medical service.. . . . .		2,629 31	
Engineering.. . . . .		627,544 99	
Insurance.. . . . .		1,378 58	
Transport.. . . . .		213,935 89	
Grading.. . . . .		4,851,413 62	
Clearing.. . . . .		217,413 16	
Grubbing.. . . . .		153,699 08	
Overhaul.. . . . .		113,559 63	
Ties.. . . . .		394,531 51	
Track laying and surfacing.. . . . .		124,144 90	
Tunnels.. . . . .		2,094 00	
Telegraph lines.. . . . .		20,874 84	
Ballast and ballasting.. . . . .		267,984 46	
Water stations.. . . . .		87,541 61	
Rails.. . . . .		1,055,094 58	
Track fastenings.. . . . .		146,777 66	
Frogs and switches.. . . . .		18,828 94	
Right of way and station grounds.. . . . .		345 11	
Station buildings and fixtures.. . . . .		188,460 22	
Miscellaneous structures.. . . . .		54,927 41	
Shops, roundhouses and turntables.. . . . .		179,239 40	
Shop machinery and tools.. . . . .		20,680 54	
Fuel stations.. . . . .		10,206 40	
Yards and terminals.. . . . .		2,181 49	
Bridges, trestles and culverts.. . . . .		1,750,896 89	
Rent.. . . . .			\$ 94 35
Operation.. . . . .		9,613 39	
Time cheques.. . . . .			262 66
Contract reserve.. . . . .			340,798 69
Furniture.. . . . .		748 62	
		\$ 10,734,635 98	\$ 341,155 70
Less Credits.. . . . .		341,155 70	
		\$ 10,393,480 28	

E. L. PARENT,  
Acting Accountant.



SESSIONAL PAPER No. 37

## STATEMENT OF EXPENDITURE from September, 1904, to March 31, 1914—Continued.

## DISTRICT "F."

	Dr.	Cr.
Legal expenses.. . . . . \$	2,034 28	
Supplies.. . . . .	323,250 57	
Camp outfit.. . . . .	30,689 95	
General expenses.. . . . .	304,387 65	
Freight and express.. . . . .	42,853 70	
Medical service.. . . . .	2,827 02	
Engineering.. . . . .	1,599,046 92	
Insurance.. . . . .	14,839 85	
Transport.. . . . .	99,461 49	
Grading.. . . . .	20,794,439 49	
Clearing.. . . . .	358,784 96	
Grubbing.. . . . .	71,441 89	
Overhaul.. . . . .	526,184 68	
Ties.. . . . .	1,029,068 03	
Track laying and surfacing.. . . . .	265,392 61	
Fencing right of way.. . . . .	43,448 74	
Crossings, cattle-guards and signs.. . . . .	3,847 94	
Tunnels.. . . . .	195,673 46	
Telegraph lines.. . . . .	103,057 63	
Interlocking and signals.. . . . .	14,192 03	
Ballast and ballasting.. . . . .	672,630 95	
Water stations.. . . . .	365,329 06	
Rails.. . . . .	2,485,102 72	
Track fastenings.. . . . .	409,001 04	
Frogs and switches.. . . . .	88,507 67	
Right of way and station grounds.. . . . .	916,754 38	
Station buildings and fixtures.. . . . .	336,467 55	
Miscellaneous structures.. . . . .	120,198 32	
Shops, roundhouses and turntables.. . . . .	3,295,860 19	
Shop machinery and tools.. . . . .	1,263,814 83	
Fuel stations.. . . . .	68,421 03	
Yards and terminals.. . . . .	227,725 66	
Bridges, trestles and culverts.. . . . .	3,475,092 56	
Operation.. . . . .	15,086 78	
Time cheques.. . . . .		\$ 570 20
Contract reserve.. . . . .		210,395 49
Furniture.. . . . .	3,047 96	
Rent—Winnipeg terminals.. . . . .	192,500 00	
Interest—Winnipeg terminals.. . . . .	126,605 80	
	<hr/>	
	\$ 39,887,070 39	\$ 210,965 69
Less Credits.. . . . .	210,965 69	
	<hr/>	
	\$ 39,676,104 70	

E. L. PARENT,

Acting Accountant.



5 GEORGE V., A. 1915

## STATEMENT OF EXPENDITURE from September, 1904, to March 31, 1914—Continued.

## RECAPITULATION.

	Dr.	Cr.
Legal expenses.. . . . . \$	5,523 88	
Supplies.. . . . .	1,186,912 34	
Camp outfit.. . . . .	176,731 95	
General expenses.. . . . .	1,195,141 69	
Freight and express.. . . . .	161,274 43	
Medical service.. . . . .	18,451 87	
Engineering.. . . . .	7,245,168 93	
Special item paid, in 1905, by Finance Department, for surveys made by the Grand Trunk Pacific Railway, east of Winnipeg..	352,191 73	
Insurance.. . . . .	28,843 57	
Grading.. . . . .	66,861,135 04	
Clearing.. . . . .	1,628,491 55	
Grubbing.. . . . .	789,331 76	
Overhaul.. . . . .	2,405,265 39	
Ties.. . . . .	3,908,880 15	
Track laying and surfacing.. . . . .	1,351,254 56	
Fencing right of way.. . . . .	386,922 55	
Crossings, cattle-guards and signs.. . . . .	69,460 60	
Tunnels.. . . . .	323,918 55	
Telegraph lines.. . . . .	418,032 85	
Interlocking and signals.. . . . .	66,106 80	
Ballast and ballasting.. . . . .	2,964,208 24	
Water stations.. . . . .	1,003,382 07	
Rails.. . . . .	11,010,342 25	
Track fastenings.. . . . .	1,731,094 72	
Frogs and switches.. . . . .	278,147 55	
Right of way and station grounds.. . . . .	2,613,958 27	
Station buildings and fixtures.. . . . .	1,449,540 51	
Miscellaneous structures.. . . . .	343,694 54	
Shops, roundhouses and turntables.. . . . .	4,418,822 64	
Shop machinery and tools.. . . . .	1,519,235 27	
Fuel stations.. . . . .	227,918 53	
Yards and terminals.. . . . .	2,124,250 23	
Joint terminals in Quebec.. . . . .	201,422 45	
Floating equipment.. . . . .	456,234 04	
Docks and wharves.. . . . .	245,573 72	
Bridges, trestles and culverts.. . . . .	21,313,469 39	
Rent.. . . . .		\$ 3,284 43
Operation.. . . . .	149,028 04	
Time cheques.. . . . .		1,140 55
Furniture.. . . . .	25,297 71	
Leonard shops.. . . . .	470,097 65	
Rent—Winnipeg terminals.. . . . .	192 500 00	
Interest—Winnipeg terminals.. . . . .	126,605 80	
	\$141,443,863 81	\$ 4,424 98
Less Credits.. . . . .	4,424 98	
	\$141,439,438 83	
Less contract reserve.. . . . .	1,355,471 32	
	\$140,083,967 51	
Headquarters.. . . . .	1,816,947 19	
Transport.. . . . .	1,030,901 41	
	\$142,931,816 11	
Cost of Operation, District "A," for the year 1912-13.. . . . .	36,182 91	
Total expenditure.. . . . .	\$142,967,999 02	

E. L. PARENT,  
Acting Accountant.



SESSIONAL PAPER No. 37

OTTAWA, July 3, 1914.

*To the Commissioners of the Transcontinental Railway:*

GENTLEMEN,—I have the honour to submit the following statement of purchases made in the different provinces of Canada, and also in Great Britain and the United States, during the fiscal year ending March 31, 1914.

Nova Scotia.. . . .	\$ 34,952 56
New Brunswick.. . . .	7,679 45
Quebec.. . . .	179,313 60
Ontario.. . . .	137,336 23
Manitoba.. . . .	11,467 42
United States .. . . .	31,212 71
Great Britain.. . . .	57 21
	<hr/>
	\$ 402,019 18

I have the honour to be

Your obedient servant,

A. L. OGILVIE,  
*General Purchasing Agent.*



